Video cassette recorder

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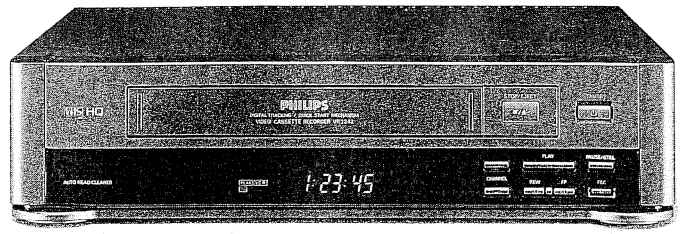

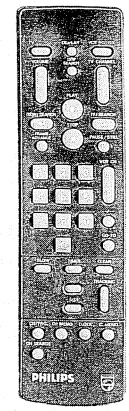

ServiceManual

VR3242 is a video cassette recorder with a TV-reception part and electronic timer, suitable for recording and playing back TV-signals which meet the PAL TV-standard.
The signals are recorded on tape according to the VHS-standard.

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I.R.-Remote Control Servicecodenumber : 4822 218 30671

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

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PHILIPS

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SPECIFICATIONS

Format	: VHS PAL standard
Head Configuration	: DA2-head rotrary slant azimuth helical scanning
Video signal	: PAL colour or B&W signals 625 lines
Recording playing time	: 4 hours max with E240 tape
Tape width	: 12.7 mm
Tape speed	: 23.39 mm/sec
Antenna	: 75 Ω unbalanced
Tuning System	: Frequency Synthesized System
Receiving channel /57	: PAL I
/75	: PAL B/G
/95	: PAL B/G
RF converter output signal	: Ch 32 - 40
Power requirement	: 220V +/- 10% , 50Hz
Operating temperature	: 5°C to 40°C
Operating humidity	: 5 - 80 %
Storage temperature	: -20°C to 60°C

VIDEO	
Input	: 1.0 Vp-p, 75Ω
Output	: 1.0 Vp-p, 75Ω
AUDIO	0 dB = 0.775 Vrms
Input	: Line: - 8 dBs, > 50 KΩ unbalanced
Output	: Line: - 6 dBs, < 1 KΩ unbalanced (100kohm load)
Accessories included	: RF cable Operating manual Infrared remote control Battery

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As part of our policy of continuous improvement, we reserve the right to alter design and specifications without notice.

SECTION 1
DISASSEMBLY AND MECHANISM ADJUSTMENT

1.1 DISASSEMBLY

1.1.1 Top cover

1. Take out 4 screws A and a screw B.
2. To remove the top cover, slide in direction of arrow and lift away.

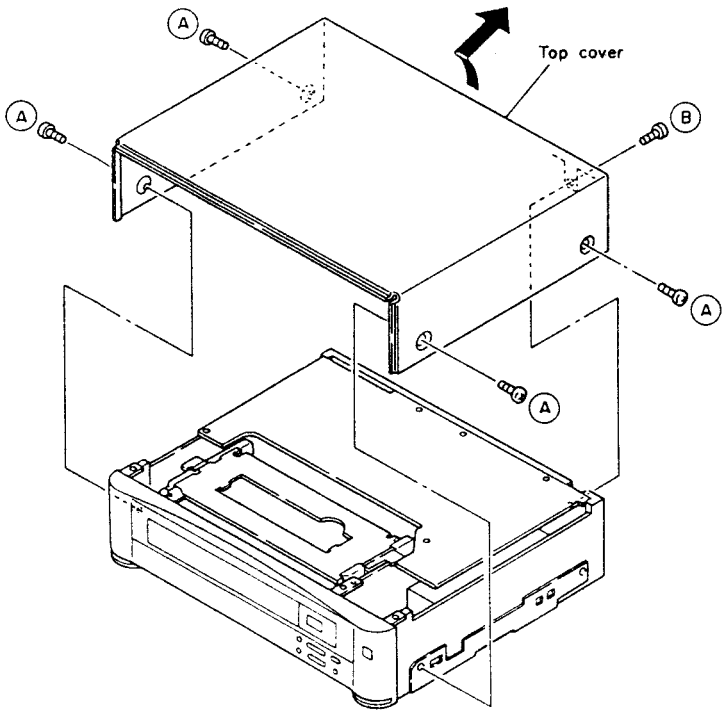


Fig.1-1-1 Top cover

1.1.2 Front panel assembly

1. Remove the top cover.
2. Carefully disengage 3 tabs a of the front panel assembly from the upper side of the chassis.
3. Pull the front panel assembly forward you to disengage 3 tabs b of the front panel assembly from the bottom of the chassis, then remove the front panel assembly.

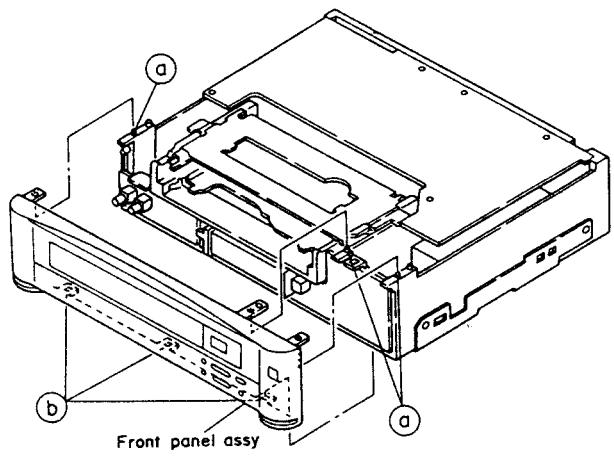


Fig.1-1-2 Front panel assembly

1.1.3 Bottom cover

1. Remove the top cover.
2. Take out 3 screws C.
3. Disengage 7 claws a from the bottom of the chassis.
4. Disengage the bottom cover from the bottom of the chassis.

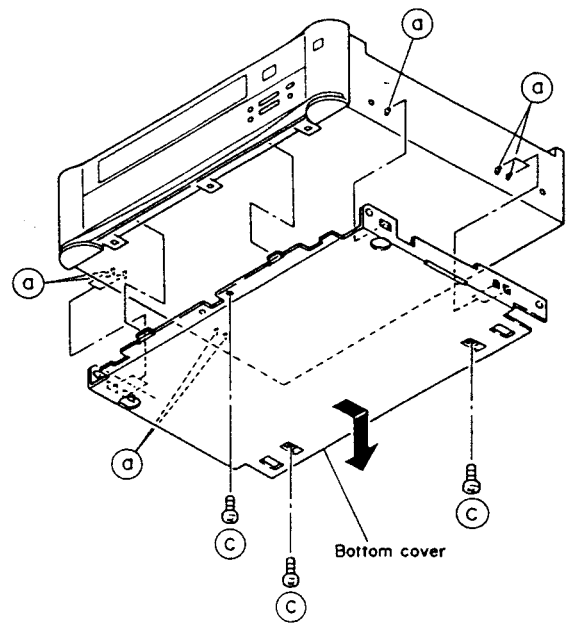


Fig.1-1-3 Bottom cover

1.1.4 MAIN board assembly

1. Remove the top cover.
2. Take out 4 screws C and disengage a claw a from MAIN board assembly.
3. Remove the MAIN board assembly in the direction of arrow.

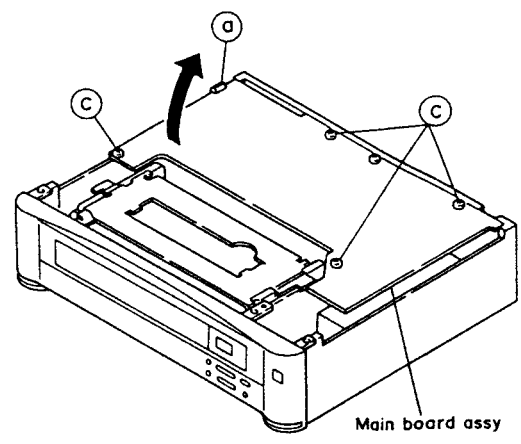


Fig.1-1-4 MAIN board assembly

1.1.5 Drum shield

1. Remove the top cover and MAIN board assembly.
2. Take out a screw D and a screw E.
3. Remove the drum shield in direction of arrow.

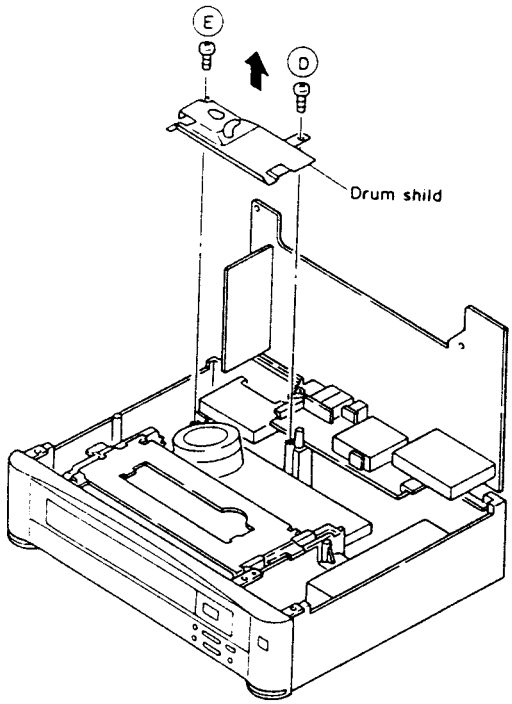


Fig.1-1-5 Drum shield

1.1.6 Cassette housing assembly

1. Remove the top cover, front panel, MAIN board assembly and drum shield.
2. Take out 4 screws F.
3. Remove the cassette housing assembly in direction of arrow.

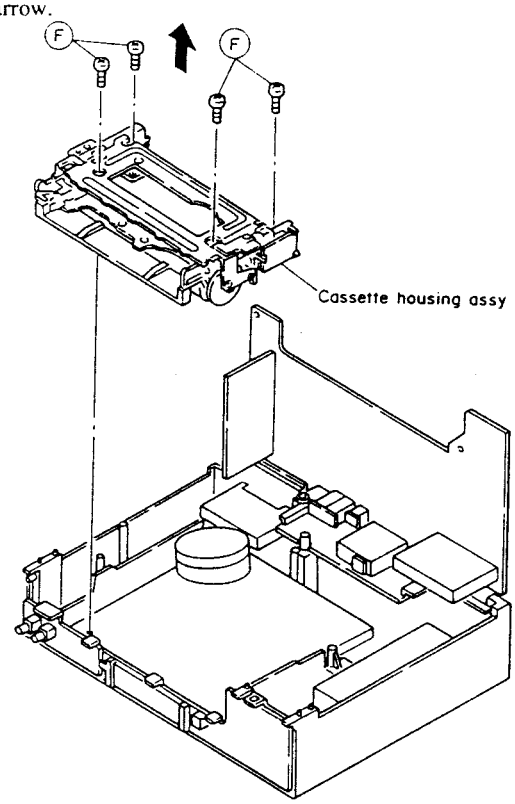


Fig.1-1-6 Cassette housing assembly

1.1.7 Cassette housing installation

Note: Observe the mechanical phase and position (see figure) when installing the cassette housing assembly. If these are incorrect, the system will not operate properly even when tape is inserted.

1. Check that the marks of the control cam and pinch roller cam are aligned. If necessary, turn the worm clutch by hand to adjust the position.

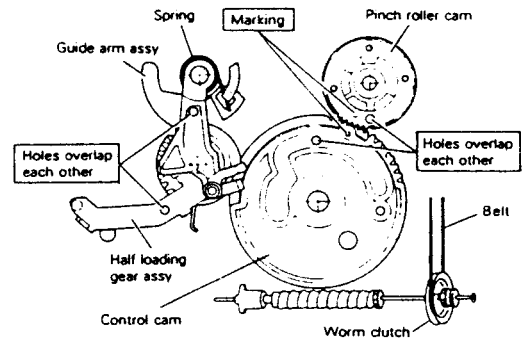


Fig.1-1-7 Control cam and pinch roller cam position

2. Confirm that the clutch of the worm clutch assembly is locked.
   If necessary, engage the locked.

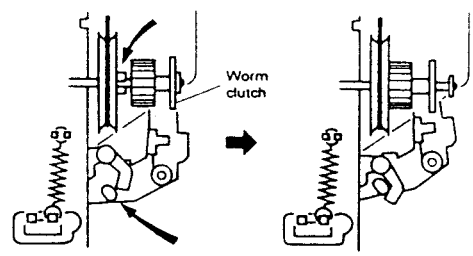


Fig.1-1-8(a) Not looked Fig.1-1-8(b) look engaged

3. Install the front panel as shown in Fig.1-1-9 and re-engage the tabs. Supply power and use a spare cassette to check for normal loading and eject operations.

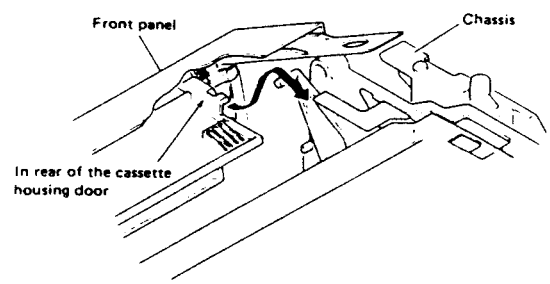


Fig.1-1-9 Cassette housing door

1.1.8 SWITCHING REGULATOR board assembly

1. Remove the top cover and MAIN board assembly.
2. Take out 2 screws C.
3. Remove the SWITCHING REGULATOR board assembly in direction of arrow.

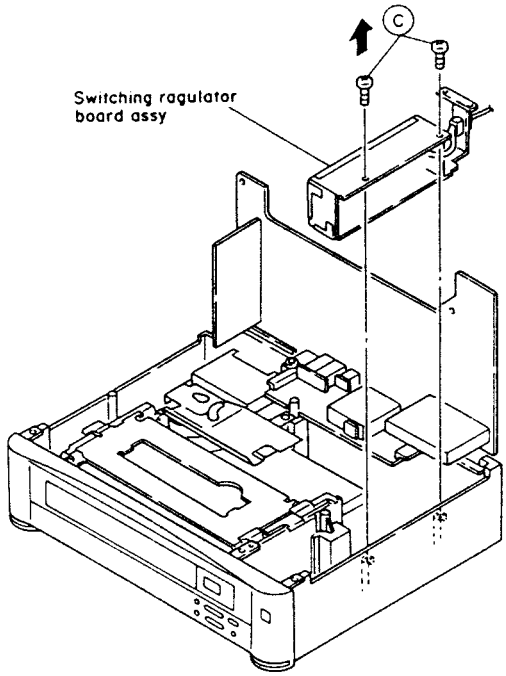


Fig.1-1-10 SWITCHING REGULATOR board assembly

1.1.9 TIMER/DISPLAY/SWITCH board assembly

1. Remove the top cover and front panel.
2. Disengage 3 claws a from the chassis.
3. Disengage 3 claws b, then remove the TIMER/DISPLAY/SWITCH board assembly in direction of arrow.

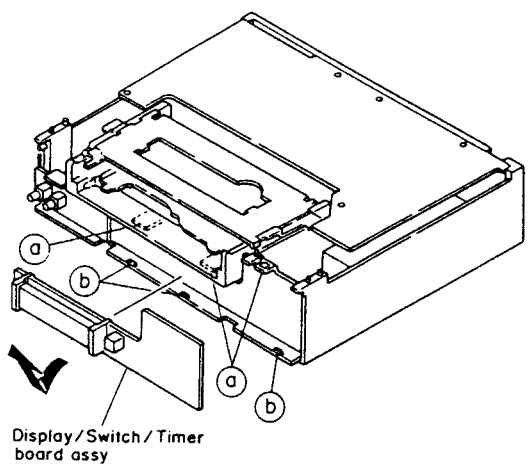


Fig.1-1-11 TIMER/DISPLAY/SWITCH board assembly

1.1.10 PRE/REC board assembly

1. Remove the top cover, MAIN board assembly and drum shield.
2. Disconnect connectors CN701 and CN702 from the PRE/REC board assembly.
3. Take out 2 screws D.
4. Remove the PRE/REC board assembly in direction of arrow.

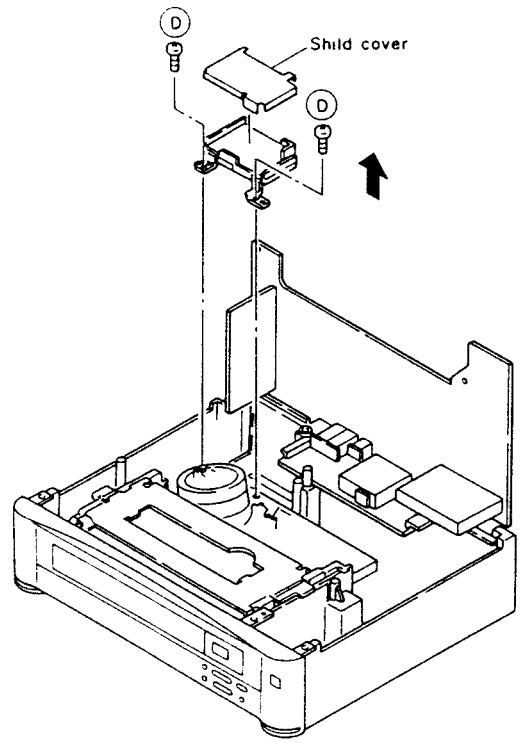


Fig.1-1-12 PRE/REC board assembly

1.1.11 Main deck assembly

1. Remove the top cover, front panel, MAIN board assembly, drum shield and cassette housing assembly.
2. Take out 3 screw G and disengage 2 claws a from the chassis.
3. Remove the main deck assembly in direction of arrow.

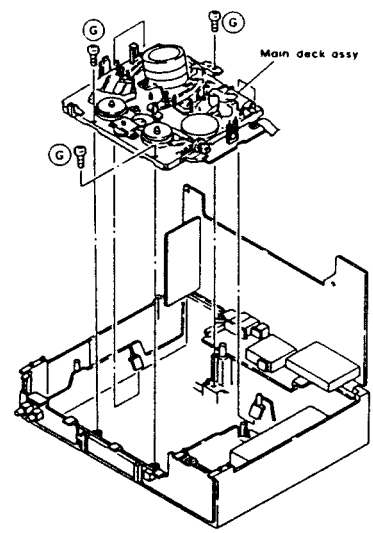


Fig.1-1-13 Main deck assembly

1.2 MECHANISM ADJUSTMENT

1.2.1 Precautions

1. Disconnect VCR from AC power before soldering.
2. Avoid imparting stress to wires when disengaging connectors.
3. Determine and correct the cause of difficulty before proceeding to adjustments. Do not disturb settings unnecessarily.
4. Use care not to damage tabs, claws, etc. during repairs.
5. Install the cassette housing assembly only then the mechanism is in the eject or stop mode position. In the eject mode, the internal holder of the housing is fully raised. This is fully lowered in the Stop mode.
6. When installing the front panel assembly, be sure to engage the housing door with the door lever of the cassette housing assembly. If this is omitted, the door will not open at eject and the cassette cannot be removed.

1.2.2 Check without cassette housing

Mechanism operations can be observed easily by removing the cassette housing assembly. Note the following.

1. Disable the photo transistor sensor(END SENSOR) on the main-deck by applying an opaque cover.
2. Connect pins 2 and 3 of Main board connector CN601.
3. Select the desired modes with the operation buttons. However, notice that without tape, setting for the reverse direction modes produces the Stop mode after a few seconds due to absence of the reel sensor output.

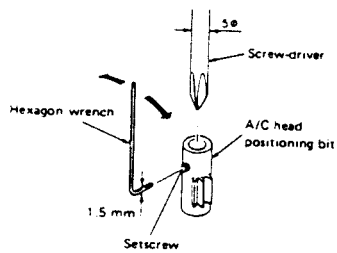


Fig.1-2-1 A/C head positioning tool

1.2.3 Manually removing cassette tape

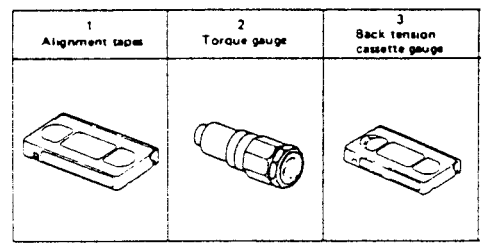
In event of electrical system failure that prevents the tape from being unloaded, the tape can be removed manually by the following procedure. Refer to Figs. 1-3-1, 1-3-2 and 1-3-3.

1. Disconnect power cord from AC outlet.
2. Turn the loading motor by hand so that the control cam rotates clockwise. This retracts the pole base assembly to the unloading position.
3. Continue turning to where the guide arm and half loading gear assemblies shift to beneath the cassette.
4. Turn the clutch assembly at the rear of the deck to absorb slack tape within the cassette.
5. Again turn the loading motor in the same direction to raise the cassette and remove it.

1.2.4 Test equipment

The following special tools and fixtures are required for mechanism adjustment.

1. Adjustment tape : MH-1 and MH-1L
   Stairstep signal is employed for interchangeability checks and adjustments.
2. Torque gauge : PUJ48075-2
   Measures tape take-up torque.
3. Back tension cassette gauge : PUJ48076-2
   Measures tape tension at the supply side.
4. A/C head positioning bit : PTU94010
   Shifts the head base for adjusting the control head position. The installation of a A/C head positioning bit on the screw-driver. Refer to Fig.1-2-1. Set screw-driver into the A/C head positioning bit where it does not interfere with adjusting boss (position the screw-driver point 6 +/- 2 mm from point of the A/C head positioning bit). Slightly tighten the setscrew by hexagon-wrench (1.5 mm).
5. Roller driver : PTU94002
   Turns the guide roller for adjusting FM linearity.
6. Presetting unit : PTU94008
   Use for SLP auto tracking preset adjustment.



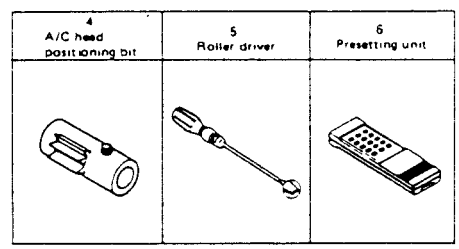


Fig.1-2-2 Test equipment

1.3 UPPER DRUM AND VIDEO HEAD

1.3.1 CLEANING

1. Open the unit to gain access to the video heads.
2. Use a cassette housing without tape or a cassette with the tape cut or the procedure to operate the unit without a cassette (cover the supply sensor hole or the cassette). Access the play mode.
3. Use two (2) cleaning cloths moistened with 91% isopropyl alcohol. Hold them very gently against the rotating video heads. Refer to Fig.1-3-1.
4. It is recommended to also clean the tape tension pole and capstan at the same time.

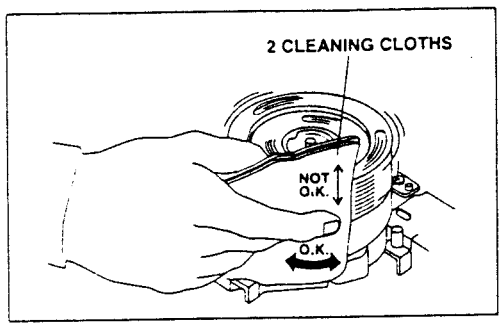


Fig .1-3-1

CAUTION:

Never operate or turn the drum in a clockwise direction (top view).
The oil in the one way spiral groove bearing will be forced out and cause the drum motor to fail.

Note:
1. Do not rub vertically.
2. Do not apply pressure to the head.
If containment is not easily removed, continued gentle cleaning will usually remove it.
3. After cleaning the video heads, stop the drum from rotating, clean fingerprints from the drum wit 91% isopropyl alcohol. Do not touch drum assembly with bare hands, use nylon gloves.

1.3.2 REPLACEMENT OF UPPER DRUM UNIT

1.REMOVAL
Work with extreme care when removing or replacing the upper drum unit.
Do not touch the video heads during servicing.

1) Open the Top cover, Main board and Drum shield cover. Then remove the Pre/Rec assy and Drum motor assy.
2) Take out the screw and remove the brush assembly. See Fig.1-3-2.

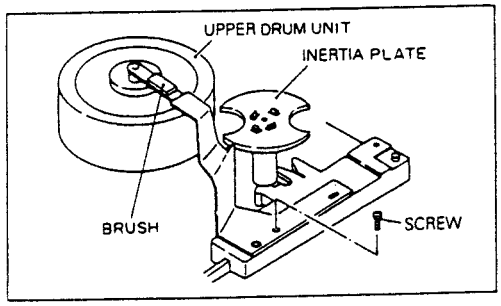


Fig.1-3-2

3) Pull the inertia plate straight up and remove it with the brush assembly.
4) Insert the locking pin into the larger pin hole on the lower portion to prevent rotation (the locking pin is included with the upper drum).
5) Loosen clamp screw A 3 or 4 turns and very carefully lift the upper drum from the shaft. See Fig.1-3-3

Note:
If the upper drum will not come off its shaft easily, use Video Head puller to remove it.

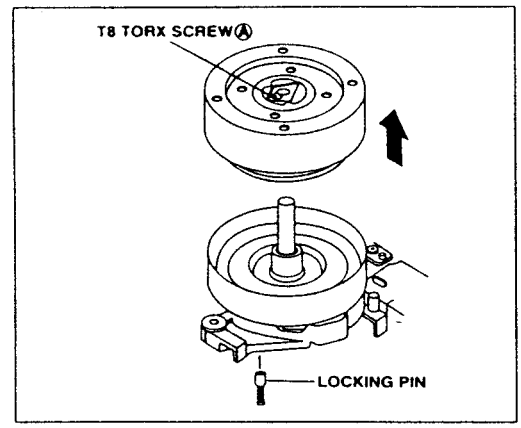


Fig.1-3-3

2. CLEAN LOWER DRUM AND SHAFT PLATE
Before installing the new unit, use a lint-free cloth dampened with 91% isopropyl alcohol to clean the lower drum shaft and the surface that engages with the upper drum (Fig.1-3-4).

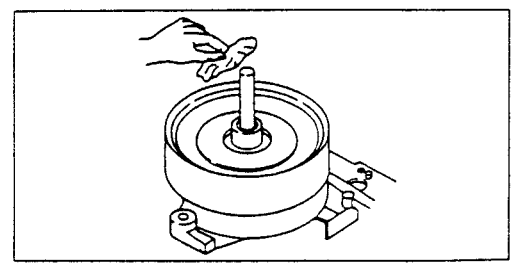


Fig.1-3-4

3. REPLACEMENT
1) Examine the new upper drum and confirm absence of damage.
2) Carefully wipe the upper drum with 91% isopropyl alcohol.
3) Insert the locking pin into the larger pin hole on the lower portion to prevent rotation (the locking pin is included with the upper drum).
4) Set the protector cover correctly onto the upper drum and insert two mylar foils (Fig.1-3-5).
5) Then set it into the notch and lower it onto the lower drum.

6) Turn clamp screw A clockwise and tighten to 20N-cm (7.9N-inch) torque.
7) Remove the protector cover and pull out the mylar foils.
8) Remove the bottom locking pin.

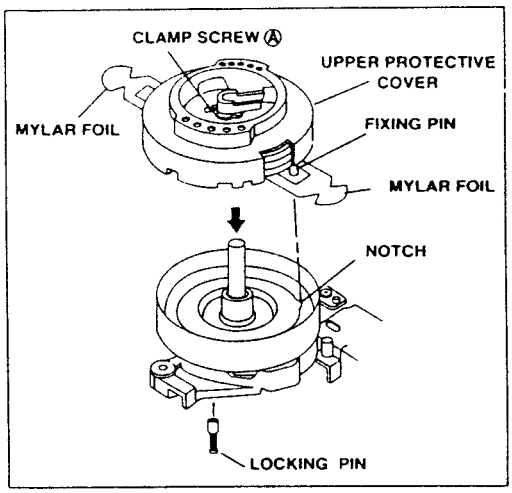


Fig.1-3-5

Note:
After replacement of the upper drum the following checks and adjustments have to be performed:
-Video head switching point
-Tape interchangeability adjustment
-Recording color level

1.4 ADJUSTMENT PROCEDURES OF MECHANISM

1.4.1 TENSION ARM POSITIONING

1) Check that the cassette housing is in the eject state (cassette holder is locked in eject position).
2) Turn the eccentric adjust pin to align the notch of the pin with the tension arm indent as shown in Fig.1-4-1.

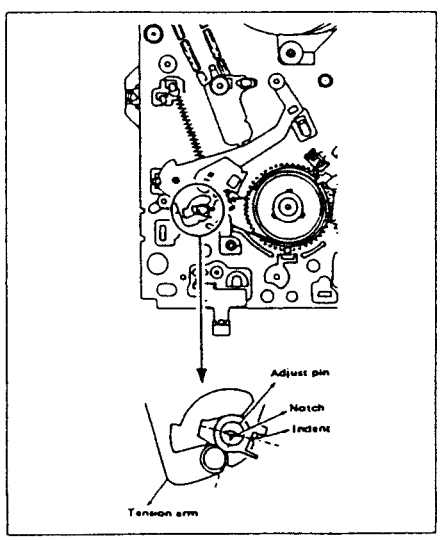


Fig.1-4-1

Note:
Normally, if the tension pole position is properly adjusted, the back tension will assign the correct value.
Use the Tension Meter and confirm playback tension is 35 g-cm to 48 g-cm (13.8 g-inch to 18.9 g-inch).

1.4.2 PINCH ROLLER CAM POSITION

1) Set the mechanism to the eject mode (cassette holder is locked in eject position).
2) Install the pinch roller cam so the largest hole near the gear teeth is aligned with the hole on the chassis.
3) Set the control cam on the deck with the hole in the groove aligned with the hole on the chassis. Observe that the small hole on the control cam and the mark on the pinch roller cam are aligned. (If the control cam does not fit readily, shift the loading arm and plate assembly within the range of mechanical play.)
4) Install the half-loading gear assembly with the hole aligned with the hole on the chassis. Secure With split washer.
5) Install the guide arm assembly with the hole aligned with hole on the chassis. Engage the spring properly.

Note:
This is the correct mechanical alignment to install the cassette housing.
The cassette housing should also be in the eject the position.

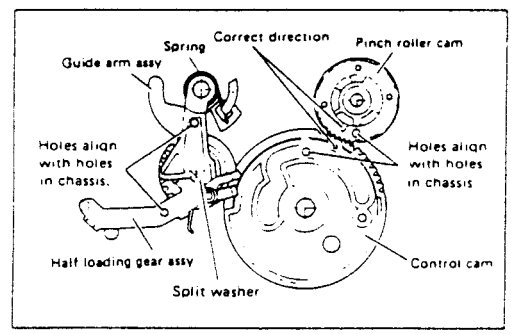


Fig.1-4-2

1.4.3 LOADING ARM AND PLATE ASSY POSITION

1) Set for Eject mode and remove the deck terminal board.
2) Check that the preset hole of the plate assembly is in the preset position. Temporarily insert a 3 mm screw to hold the position.
3) By hand, hold the loading arms in the unloading (inner) position and set the plate assembly from above.
4) Install Red and White split washers. Remove temporary screw.
5) Move the mode motor belt by hand and confirm mechanism operation.

Note:
Observe that the brake assembly pin engaged with the plate assembly groove.

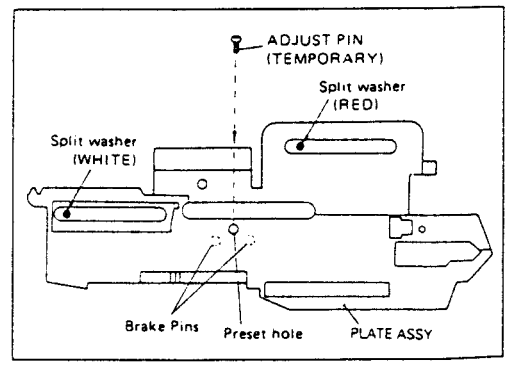


Fig.1-4-3

1.4.4 REEL DISK HEIGHT

1) Measure the height of the reel disk above the main chassis.
2) Add or remove washers at the bottom of the reel disk to adjust for 12 mm. See Fig.1-4-4

Note:
This adjustment is normally not needed.
Perform after replacing the reel disk.

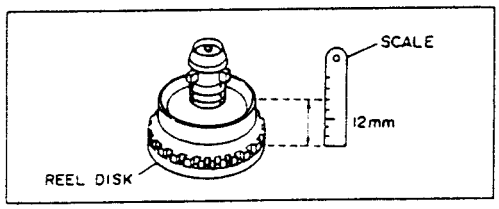


Fig.1-4-4

1.4.5 AUDIO/CONTROL HEAD HEIGHT

1) Adjust the 3 screws (screw 1, 2, 3 in Fig.1-5-1) to set the audio/control head height to 6.6 mm. Adjust all screws equally.
2) Perform interchangeability adjustments to obtain the specified control pulse and audio signal levels.

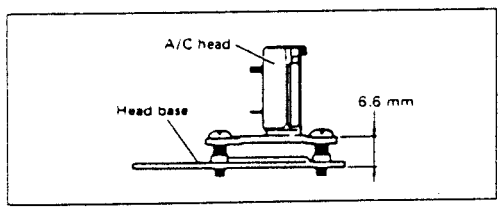


Fig.1-4-5

Note:
1. It is very important to correctly adjust the control pulse and audio signal in addition to the mechanical tape path.
2. Perform interchangeability adjustments after electrical adjustments.

1.5 TAPE INTERCHANGEABILITY ADJUSTMENTS

Note:
This adjustment is extremely important. However, it is normally not required during routine service. Perform only after replacing major components (A/C head, upper drum, etc.).

1.5.1 TAPE TRANSPORT CHECK

Purpose:
Confirm stable tape running.

Check for:
Use a spare tape and check for unstable tape travel and signs of tape damage.
Do not use a VHS Alignment tape before confirming stable tape transport.

1.5.2 A/C HEAD HEIGHT AND INCLINATION

This adjustment presumes completion of mechanical height adjustment and normal electrical circuit operation.

1. HEIGHT AND AZIMUTH ADJUSTMENT OF A/C HEAD

Purpose:
To adjust the position and height of the A/C Head so that it meets the tape tracks properly.

Symptom of Misadjustment:.
If the position of the A/C Head is not properly adjusted, the Audio S/N Ratio is also poor.

1) Connect the oscilloscope to the audio output jack on the rear of the deck.
2) Play back the stairstep portion (7kHz, Mono) of the alignment tape.
3) Adjust Black Screw 2 on the head base in Fig.1-5-1 so that the output level is at a maximum.
4) Readjust Screw 1 shown in Fig.1-5-1 for maximum output.
5) Disconnect the oscilloscope.

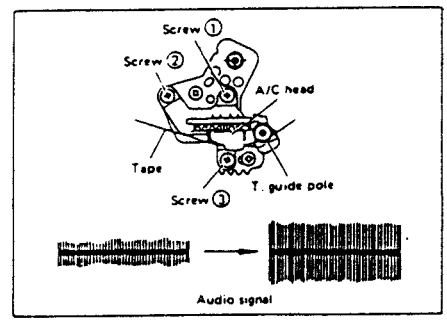


Fig.1-5-1

2. HORIZONTAL POSITION ADJUSTMENT OF A/C HEAD

Purpose:
To adjust the horizontal position of the A/C head.

Symptom of Misadjustment:
If the horizontal position of the A/C head is not properly adjusted, maximum envelope can not be obtained at the neutral position of the tracking control circuit.

1) Play back the stairstep portion of the alignment tape.
2) Connect the oscilloscope to TP206 (PB FM/COLOR) on the Video Signal Process Section of the Main board. Use TP411 (DRUM FF) as a trigger.
   Confirm that the RF envelope appears, as in Fig.1-5-4.
3) Set the neutral manual tracking position, by one quick press of the tracking up button on the remote control.
4) If adjustment is required, slightly loosen screws 4 and 5.
   Set A/C head positioning tool on the A/C head adjusting boss as shown in Fig.1-5-2
5) Turn the tool first to position the A/C head fully toward the capstan. Then gradually return it toward the drum and stop at the position of maximum FM waveform output level as shown in Fig.1-5-4
6) Tighten screw 5. Remove the tool and tighten screw 4.
7) Reset the tracking to the neutral position by ejecting a tape. Then play back mode again, push the tracking up and down buttons several times each other (count the number of times pushed) until the maximum envelope is reduced to 1/2.
8) Confirm that the number of pushes is the same.

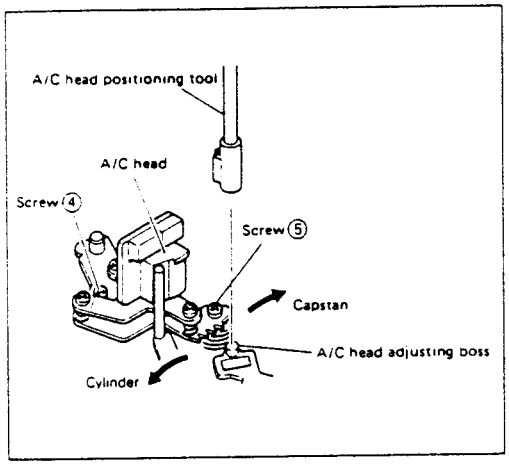


Fig.1-5-2

1.5.3 PLAYBACK TRACKING

This is the most important adjustment.
If incorrect, proper tracking will not be obtained in recording and playback.
Other problems that may occur are noise in parts of the picture, poor color reproduction and picture instability.

1) Play back the stairstep portion of the alignment tape.
2) Connect the oscilloscope to TP206 (PB FM/COLOR) on the Video Signal Process Section of the Main board. Use TP411 (DRUM FF) as s trigger.
   Confirm that the RF envelope appears, as in Fig.1-5-4.
3) Operate the tracking adjustment (press the tracking buttons during playback) and set for maximum playback luma. waveform.
4) If adjustment is required, first slightly loosen the set screw located at the bottom of the guide rollers.
   Using the guide roller adjustment tool adjust the supply and take-up guide rollers (refer to Fig.1-5-3) to obtain the correct waveform. Refer to Fig.1-5-5.

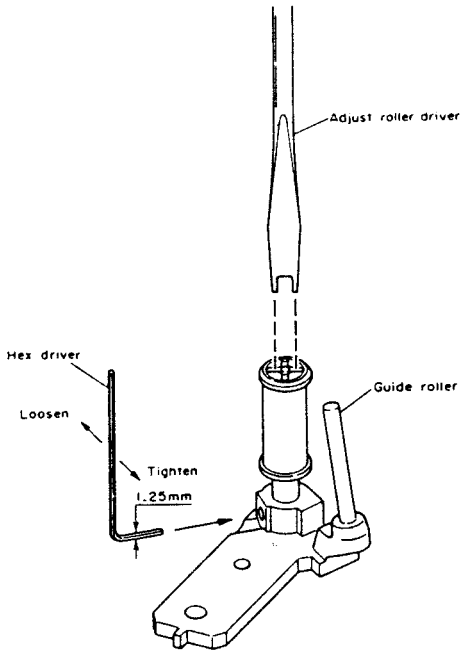


Fig.1-5-3

5) By pushing the tracking buttons several times, vary the FM waveform output from maximum to minimum (& vice versa) gradually,and confirm that the variation proceeds in a flat shape, as in Fig.1-5-6.
6) If the FM waveform breaks in the varying process, adjust height of guide roller(s) subtly every breaking so that variation proceeds as flat as possible.
7) Eject a tape and then for playback tape again, since the height of guide rollers may move during adjustment.
   Confirm, when pushing the tracking up and down buttons, FM waveform variation is always flat.
8) After adjustment,confirm that the tape wrinkling does not occur at the roller flanges, as in Fig.1-5-7
9) Perform step 1-5-2, A/C HEAD HEIGHT AND INCLINATION.

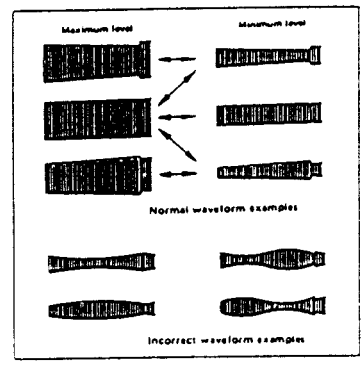


Fig.1-5-4

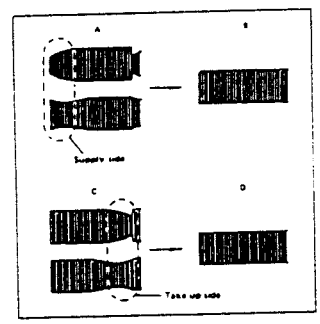


Fig.1-5-5

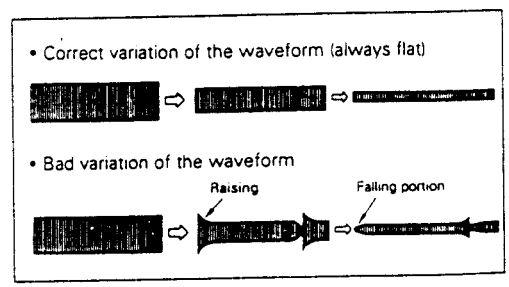


Fig.1-5-6

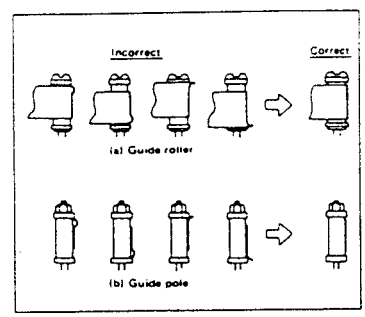


Fig.1-5-7

SECTION 2
ELECTRICAL ADJUSTMENTS

2.1 PREPARATION

Electrical adjustments are required after replacing circuit components and certain mechanical parts.
It is important to perform these adjustments only after all repairs and replacements have been completed.
Also, do not attempt these adjustments unless the proper equipment is available.

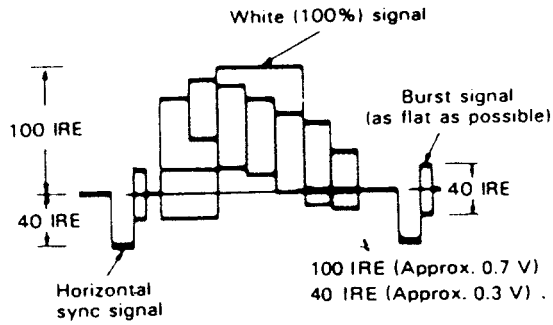


Fig.2-1-1 Color Bar Signal of Pattern Generator

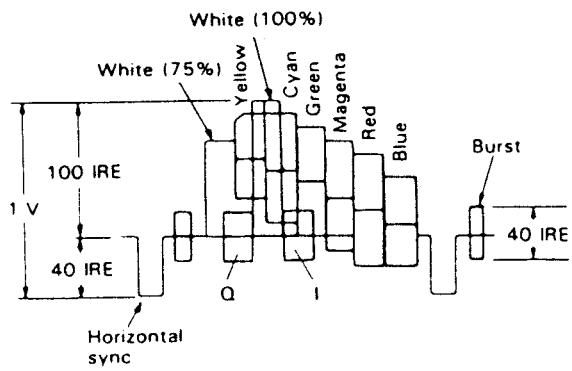


Fig.2-1-2 Color Bar signal waveform

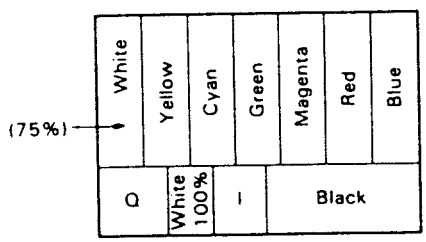


Fig.2-1-3 Color Bar pattern

2.2 REQUIRED TEST EQUIPMENT AND ADJUSTMENTS TOOLS

To perform the electrical adjustments completely, the following equipment is required.

1. Color television or monitor
2. Oscilloscope: 50 MHz, dual-trace, triggered delayed sweep
3. Frequency counter
4. Video Sweeper
5. Audio oscillator
6. AC millivoltmeter
7. Digital voltmeter
8. Signal generator: PAL/*SECAM color bar, stairstep
9. Recording tape
10. Presetting unit
11. VHS alignment tape

*Note : *SECAM is required for VR3242/95*

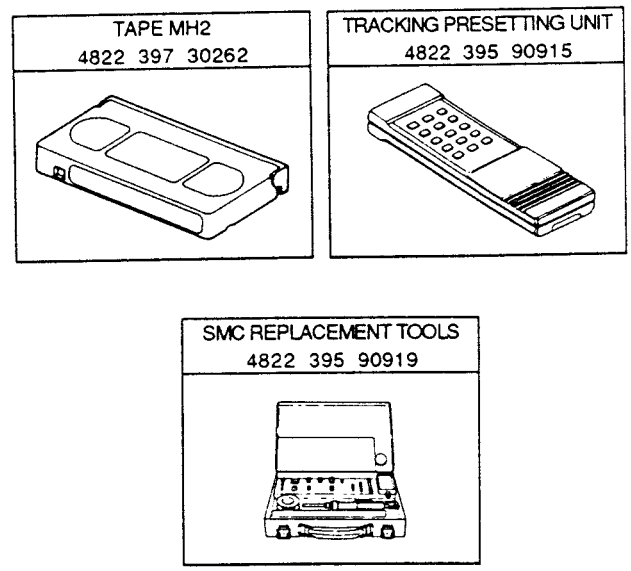


Fig. 2-2-1

2.3 CHECK AND ADJUSTMENT STEP

The check and adjustment step are provided in the following the form of charts.
For clarity, the nomenclature used in the charts is outlined below.

Mode	Equipment operating mode at time of check or adjustment
EE	Power on and machine in Stop mode
REC	Recording mode
PB	Playback mode
SLOW	Slow motion during playback mode
SP	SP recording speed

Test Point:
Location to which measuring playback instrument(oscilloscope unless otherwise noted) is to be connected.

Adjustment Part:
Variable component(resistor, capacitor, etc.)to be adjusted in this step.

Specification:
Specification for check or adjustment.

2.4 DIGITAL TRACKING OFF/ON SETTING

Set the tracking to the digital tracking neutral position by ejecting the cassette.
Observe the display on a monitor-TV and adjust for optimum noise free condition (best tracking) by depressing "up" or "down" tracking button during playback mode.

2.5 ADJUSTMENT PROCEDURES

The adjustment procedures consist of the following sections.
1.SW Regulator Section
2.Servo Section
3.Video Section
4.Audio Section
5.Timer Section
6.Tuner/IF Section

2.5.1 SW REGULATOR SECTION

Note:
Unless otherwise specified, all test points and adjustments are located on the MAIN board.

5V DC OUTPUT ADJUSTMENT

Purpose:
Set for optimum working voltage.

Symptom of Misadjustment:
If the working voltage becomes higher or lower, the VCR will malfunction.

Signal	TUNER
Mode	SP REC
Measure Equipment	Digital voltmeter
Test point	TP903 (SWD 5V)
	TP902 (GND)
Adjustment Part	R805 (SWD 5V)
Specification	5.30 +/- 0.05 V

2.5.2 SERVO SECTION

Note:
Unless otherwise specified, all test points and adjustments are located on the MAIN board.

1. SP PB SWITCHING POINT ADJUSTMENT

Purpose:
Set for optimum video head switching point during playback.
Symptom of Misadjustment:
Video head switching noise or vertical jitter is visible in the picture.

Signal	Alignment tape (MH-2) stairstep
Mode	PB
Trigger slope(-)	TP411 (DRUM FF)
Measure Equipment	Oscilloscope
Test point	TP210 (VIDEO OUT)
Adjustment Part	R402 (SP PB SWITCHING PT)
Specification	6.5 +/- 0.5 H

1) Connect an oscilloscope to TP210 and TP411.
2) Play back the stairstep segment of alignment tape.
3) Adjust R402 to position the trigger point 6.5 +/- 0.5 H from V.sync as shown in Fig 2-5-1.

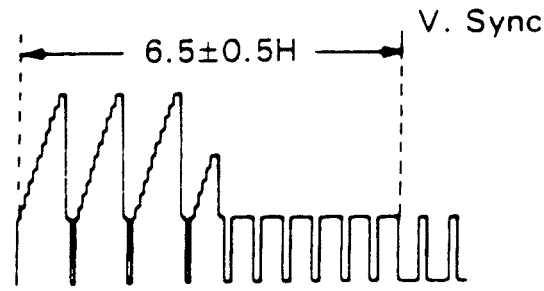


Fig. 2-5-1

2. SP SLOW TRACKING PRESET ADJUSTMENT

Purpose:
Set for optimum noise condition (best tracking)in slow motion mode.

Notes:
1) On the presetting unit use only "A", "B" or "C" buttons. Depressing on the buttons during the steps below may cause adjustment error.
2) During playback press the SLOW button for "more than 2 seconds" to begin slow motion at 1/6th the normal speed.

Signal	Color bar
Mode	SP REC then PB (SLOW)
Measure Equipment	TV-Monitor
Test point	Presetting unit
Specification	Minimum noise condition (best tracking)

1) Disconnect AC power supply for more than 3 minutes.
2) Connect the AC power supply again.
3) Set power on.
4) Record a color bar signal in SP mode.
5) Playback the self recorded tape in neutral tracking position, by a quick press.
6) Press the slow button on the remote.
7) Depress button "A" on presetting unit, to set VCR to code receive mode.
8) Observe monitor-TV and adjust for optimum noise condition (best tracking)by depressing "B" or "C" button, on presetting unit, as required.
9) Confirm that noise bar is at a minimum in picture.
10) Depress the stop button on the front panel.
11) Disconnect VCR AC power supply for more than 3 minutes.
12) Connect AC power supply again, confirm the VCR SP slow tracking.

2.5.3 VIDEO SECTION

Note:
Unless otherwise specified, all test points adjustments are located on the VIDEO UNIT board.

Important:

Item 1 thru 5.
1) Ordinarily performing these adjustment is not required. Adjustments should be performed only if IC2 on the VIDEO unit board has been replaced.
2) To adjust, replace fixed laser trimmed chip resistor with a variable chip resistor, then adjust as required.

1. EE Y LEVEL ADJUSTMENT

Purpose:
Align the output level with that obtained in the input level as reference.

Symptom of Misadjustment:
Difference between EE Y level and playback Y level.
Result in poor signal-to-noise ratio and severe distortion.

Signal	Color bar
Mode	EE
Measure Equipment	Oscilloscope
Test point	TP210 (VIDEO OUT)(Main Bd)
Adjustment Part	R60 (EE Y LEVEL)
Specification	1.00 +/- 0.06 Vp-p (terminated)

1) Connect an oscilloscope to TP210.
2) Confirm that Y level is 1.0 +/- 0.06 Vp-p.
3) If necessary, replace R60 with the variable chip resistor 4822 101 10851 and adjust for 1.00 +/-0.06Vp-p, as in Fig.2-5-2

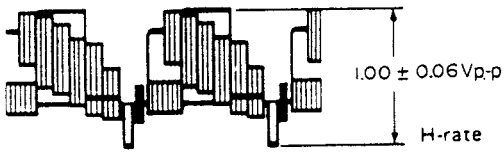


Fig. 2-5-2

2. WHITE CLIP RATIO ADJUSTMENT

Purpose:
Cut the overshoot and undershoot components which exceed certain positive and negative levels.

Symptom of Misadjustment:
If the white chip level becomes higher, picture which is sharp and blurred and black/white reversal effects appear on the monitor.
If the white chip level becomes lower, picture which is soft and small details are indistinct.

Signal	Color bar
Mode	EE
Measure Equipment	Oscilloscope
Test point	IC1 pin 22
Adjustment Part	R64 (WHITE CLIP)
Specification	WHITE CLIP: 90 +/- 4 % DARK CLIP: 45 +/- 5 %

1) Connect an oscilloscope to IC1 pin 22.
2) Confirm that white clip is 90 +/- 4 % & dark clip is 45 +/- 5%.
3) If necessary, replace R64 with the variable chip resistor 4822 101 10894 and adjust it 90+/-4% white clip and 45+/-5% dark clip, as in Fig.2-5-3.

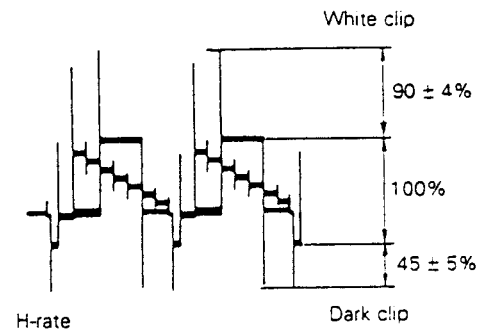


Fig. 2-5-3

3. CARRIER & DEVIATION ADJUSTMENT

CARRIER

Purpose:
A carrier frequency which is used to determine the video SYNC (3.8 MHz).

Symptom of Misadjustment:
The picture will either have a beat or black/white reversal effects.
In some cases it may disappear.

Signal	No signal
Mode	EE
Measure Equipment	Frequency counter
Test point	CN2 pin 9
Adjustment Part	R41 (CARRIER)
Specification	3.8 MHz +/- 40 kHz

DEVIATION

Purpose:
A frequency modulation deviation range of the FM carrier is 1 MHz.

Symptom of Misadjustment:
The picture will either have a dark or severe distortion.
In some cases it may disappear.

Signal	Color bar
Mode	REC then PB
Measure Equipment	Oscilloscope
Test point	TP210 (VIDEO OUT)(Main Bd)
Adjustment Part	R42 (DEVIATION)
Specification	1.00 +/- 0.06 Vp-p (terminated)

1) Connect a frequency counter to CN2 pin 9.
2) Confirm that frequency is 3.8 MHz +/- 40 kHz.
3) If necessary, replace R41 with the variable chip resistor 4822 101 10892 & adjust if for 3.8MHz +/- 40 kHz.
4) Record and playback a color bar signal.
5) Confirm that Y level is 1.00 +/- 0.06 Vp-p at TP210.
6) If necessary, replace R42 with the variable chip resistor 4822 101 10851 and adjust it for 1.00 +/- 0.06Vp-p, as in Fig 2-5-4.

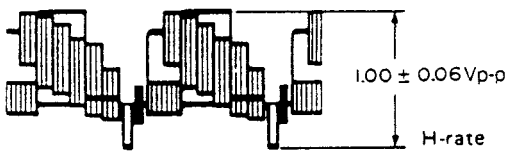


Fig. 2-5-4

4. YNR NC BALANCE ADJUSTMENT

Purpose:
The system noise is improved by employing line correlation for playback mode.

Symptom of Misadjustment:
May increase the system noise.

Signal	Color bar
Mode	EE
Measure Equipment	Oscilloscope
Test point	IC1 pin 9
Adjustment Part	R56 (NC BALANCE)
Specification	Minimum DC step difference

1) Connect an oscilloscope to IC1 pin 9.
2) Confirm that DC step difference is minimum.
3) If necessary, replace R56 with the variable resistor 4822 101 30673 and adjust if for minimum DC step difference, as in fig. 2-5-5.

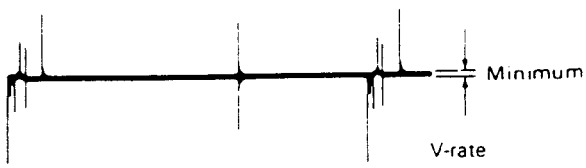


Fig. 2-5-5

5. PLAYBACK Y LEVEL ADJUSTMENT

Purpose:
Set for optimum playback Y level.

Symptom of Misadjustment:
Bright or dark picture.

Signal	Color bar
Mode	SP REC then PB
Measure Equipment	Oscilloscope
Test point	TP210 (VIDEO OUT)(Main Bd)
Adjustment Part	R17 (PB Y LEVEL)
Specification	1.00 +/- 0.06 Vp-p (terminated)

Note:
Confirm that procedure whit clip ratio adjustment is correct before performing this adjustment procedure.

1) Connect an oscilloscope to TP210.
2) Record and playback a color bar signal.
3) Confirm that Y level is 1.00 +/- 0.06 Vp-p.
4) If necessary, replace R17 with the variable resistor 4822 101 10891 and adjust it for 1.00 +/- 0.06 Vp-p, as in Fig 2-5-6.

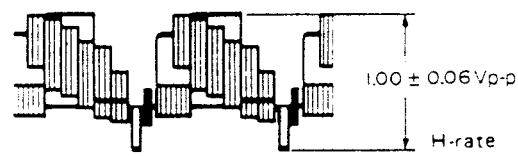


Fig. 2-5-6

6. SP RECORDING FM LEVEL ADJUSTMENT

Purpose:
Set for optimum playback Y level.

Symptom of Misadjustment:
Black/white picture or missing picture.

Signal	Color bar
Mode	REC
Measure Equipment	Oscilloscope
Test point	TP201 (SP REC COLOR)
Adjustment Part	R246 (REC FM LEVEL)
Specification	560 +/- 10 mVp-p

1) Connect an oscilloscope to TP201.
2) Record the color bar signal.
3) Adjust R246 for 560 +/- 10 mVp-p, as in Fig. 2-5-7.

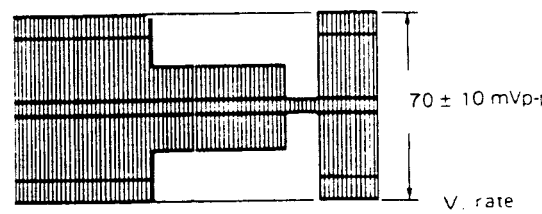


Fig. 2-5-7

7. SP RECORDING COLOR LEVEL ADJUSTMENT

Purpose:
Set for optimum recording color level.

Symptom of Misadjustment:
If the recording color level becomes higher, the beat(dots) are seen in the picture.
If the recording color level becomes lower, the color beat is caused in the picture or the color is degraded.

Signal	Color bar
Mode	SP REC
Measure Equipment	Oscilloscope
Test point	TP205 (REC COLOR)
Adjustment Part	R215 (SP REC COLOR)
Specification	70 +/- 10 mVp-p

1) Connect an oscilloscope to TP205.
2) Record the color bar signal in SP mode.
3) Adjust R215 for 70 +/- 10 mVp-p, as in Fig. 2-5-8.

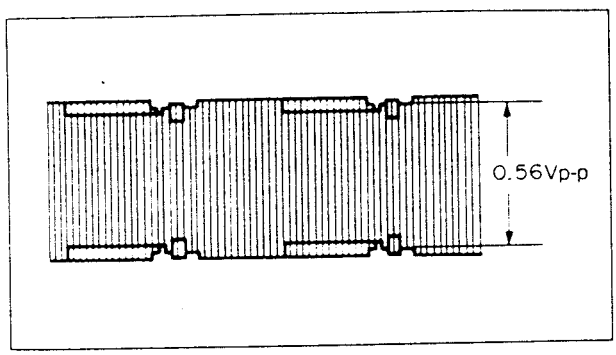


Fig. 2-5-8

8. MESECAM DETECT ADJUSTMENT
(ONLY FOR VR3242/95)

Purpose:
Set for SECAM color discrimination signal.

Symptom of Misadjustment:
No color.

Signal	SECAM color bar
Mode	EE
Measure Equipment	Oscilloscope
Test point	TP244 (MESECAM DET)
Adjustment Part	L282 (MESECAM DET)
Specification	A:B = 3:4

1) Connect an oscilloscope to TP280.
2) Adjust L282 so that A and B are related as follow:
A:B = 3:4

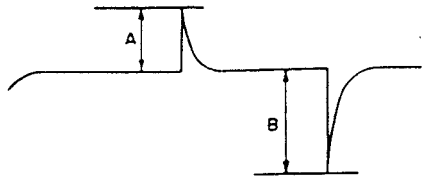


Fig 2-5-9

2.5.4 AUDIO SECTION

Note:
Unless otherwise specified, all test points and adjustment are located on the MAIN board.

1. AUDIO BIAS LEVEL ADJUSTMENT

Purpose:
The amount of bias current used is one that represents the best compromise of low distortion, extended high frequency, and high output.

Symptom of Misadjustment:
Poor signal-to-noise ratio and severe distortion.

Signal	No signal-Lone INPUT (terminated)
Mode	REC
Measure Equipment	Millivoltmeter
Test point	TP331 (BIAS +) TP332 (GND)(BIAS -)
Adjustment Part	B301 or B302
Specification	2.9+/-0.5 mVrms or 8.2+/-1.4 mVp-p

1) Insert recording video cassette into cassette housing.
2) Set for the REC mode without an incoming signal.
3) Connect a millivoltmeter between TP331 (INPUT) and TP332 (GND), and confirm 2.9 +/- 0.5 mVrms or (8.2 +/- 1.4 mVp-p) of the bias level at TP331. If necessary, perform step 4).
4) If level is higher than 3.4 mVrms (9.6 mVp-p), remove B301. If level is lower than 2.4 mVrms (6.8 mVp-p), remove B302.

2.5.5 TIMER SECTION

Note:
Unless otherwise specified, all test point and adjustment parts are located on the MAIN board.
For the following adjustments, use 1: 1 probe with input capacitance less than 100 pF.

1. CLOCK ADJUSTMENT

Signal	No signal
Mode	EE
Measure Equipment	Frequency counter
Test point	IC1 PIN42 (CLOCK)
Adjustment Part	C6 (CLOCK)
Specification	488.2813+/-0.0005 u Sec (2048.0000+/-0.002 Hz)

1) Disconnect VCR from AC.
2) Connect a frequency counter between IC1 pin42 and GND.
3) Connect VCR to AC.
4) Connect a jumper wire between IC1 pin 34 and GND.
5) Short the leads of capacitor C3 once in order to reset IC1.
6) Adjust C6 for 488.2813+/-0.0005 u Sec (2048.0000+/-0.002 Hz).

2.5.6 TUNER/IF SECTION

Note:
Unless otherwise specified, all test points and adjustment parts are located on the MAIN board.

1. VCO ADJUSTMENT

Purpose:
Set for optimum broadcast color signal.

Symptom of Misadjustment:
The picture will either have a beat or smear.
In some cases it may disappear.

* Factory Method

Signal	Sweep generator output
Mode	Tuner mode (without antenna input Signal)
Measure Equipment	Oscilloscope. IF sweep signal generator (with suitable markers, PIF, SIF, etc.)
Sweeper probe	(sweep signal supply cable)- See Fig.2-5-9.
Test point	IC1 pin 17
Adjustment Part	T4 (VCO)
Specification	38.86 MHz (no distortion)

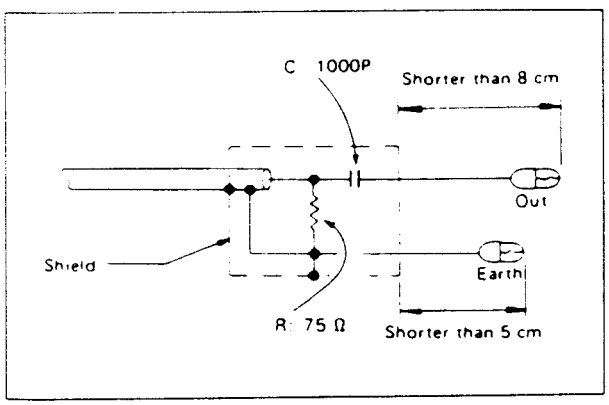


Fig. 2-5-10 Sweeper probe

1) Use a sweeper probe as shown in Fig.2-5-10 and connect the sweep generator output to pin 1 of SAW1.
2) Adjust the sweep gain so that the waveform does not distort as observed with the oscilloscope.
3) Connect the oscilloscope to pin 17 of IC1 (VIDEO DET OUT) and adjust T3 to align the waveform with the frequency marker as shown in Fig. 2-5-11.

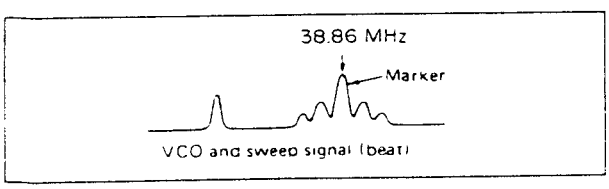


Fig. 2-5-11

* Alternate method

Signal	: TV broadcasting
Mode	: Tuner
Measure Equipment	: Monitor-TV
Other condition	: Same

1) Receive a color broadcasting on a VHF-HI channel (7 to 13).
2) Adjust T4 to obtain a fine picture on the monitor-TV. Find both sides of range of pull in and adjust to the center point.
3) Find both sides of range of pull in and adjust to the center point.
4) Select other channels to confirm proper channel selection.

2. RF AGC ADJUSTMENT

Purpose:
Determine the correction for excess noise in the picture.

Symptom of Misadjustment:
Cross interference occurs due to strong electrical fields.

Note:
Before the following adjustment,
1) Connect a cable to ANT IN and terminate TV OUT with 75 ohms.
2) Set a TV channel signal generator as follows.
Video : 65 db u 75 ohm. color bar 87.5 %modulation
Audio : 55 db u 75 ohm. 1 kHz +/- 50 kHz deviation

* Factory Method

Signal	TV broadcasting
Mode	Tuner mode
Measure Equipment	Oscilloscope TV signal generator
Test point	IF terminal (U/V tuner)
Adjustment Part	R40 (RF AGC)
Specification	Maximum level (with minimum noise)

1) Connect the oscilloscope to IF terminal of U/V tuner (front end).
2) Adjust R40 for maximum level, then again adjust R40 for 5.0 dB again.

* Alternate method

Note:
Adjust R40 (RF AGC) to correct for excess noise in the picture or when streaks cross interference occurs due to strong electrical fields.

1) Adjust R40 to minimize noise or streaks on the TV screen.
2) Adjust for noisy picture with strong signal. Then adjust until noise just disappears. Select other channels to confirm proper pick-up of channels.

3. SOUND DET. ADJUSTMENT

Purpose:
Minimize sound distortion.

Symptom of Misadjustment:
Audio level will either have small sound or no sound.

* Factory Method

Signal	TV broadcasting signal
Mode	EE (Tuner mode)
Measure Equipment	Distortion meter
Test point	AUDIO OUT (MAIN board)
Adjustment Part	T2 (FM DET)
Specification	Minimum distortion (less than 0.5 %)

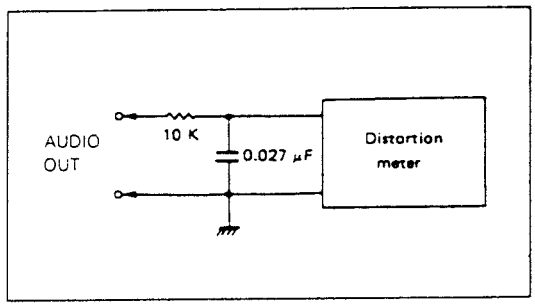


Fig. 2-5-12 Adjustment circuit

1) Using an adjustment circuit as shown in Fig 2-5-12, connect a distortion meter.
2) Adjust T2 for minimum distortion (less than 0.5 %).

* Alternate method

Measure Equipment	: Oscilloscope
Other condition	: Same

1) Receive a color broadcast on a VHF-HI channel (7 to 13). Connect an oscilloscope to AUDIO OUT on the MAIN board.
2) Adjust T2 for maximum audio sound level.

4. AFC ADJUSTMENT

Purpose:
Keep the local oscillator in the receiver from drifting off proper tuning.
(Set for optimum broadcast color signal.)

Symptom of Misadjustment:
The picture will either have a beat or smear.
In some cases it may disappear.

Signal	Sweep generator output (75dB μ, 75 ohms)
Mode	EE (Tuner mode)
Measure Equipment	Oscilloscope
Test point	IC1 pin14
Adjustment Part	T3 (AFC)
Specification	4.8 +/- 0.1 V

1) Connect a n oscillscope to IC1 pin14.
2) Input DC 7.2 V to IC1 pin 13.
3) Set the oscilloscope to DC mode and adjust T3 to set lower edge of the ripple waveform to 4.8V.

* Alternate method

1) Receive a color broadcast on a VHF-HI channel (7 to 13).
2) Connect an oscilloscope to A of the MAIN board, as in Fig.2-5-13.
3) Set the oscilloscope to DC mode and adjust T3 to set the lower edge of the ripple waveform to 4.8 V.

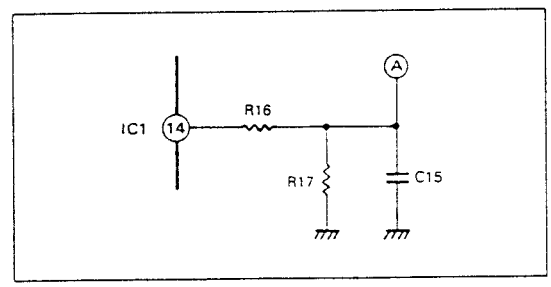


Fig. 2-5-13 Test point

CONTENTS

Note: The diagrams are generally meant for /75.
The differences between /57 & /75 are shown on pages with extension A, e.g. 3-5A.
The differences between /95 & /75 are shown on pages with extension B, e.g. 3-5B.

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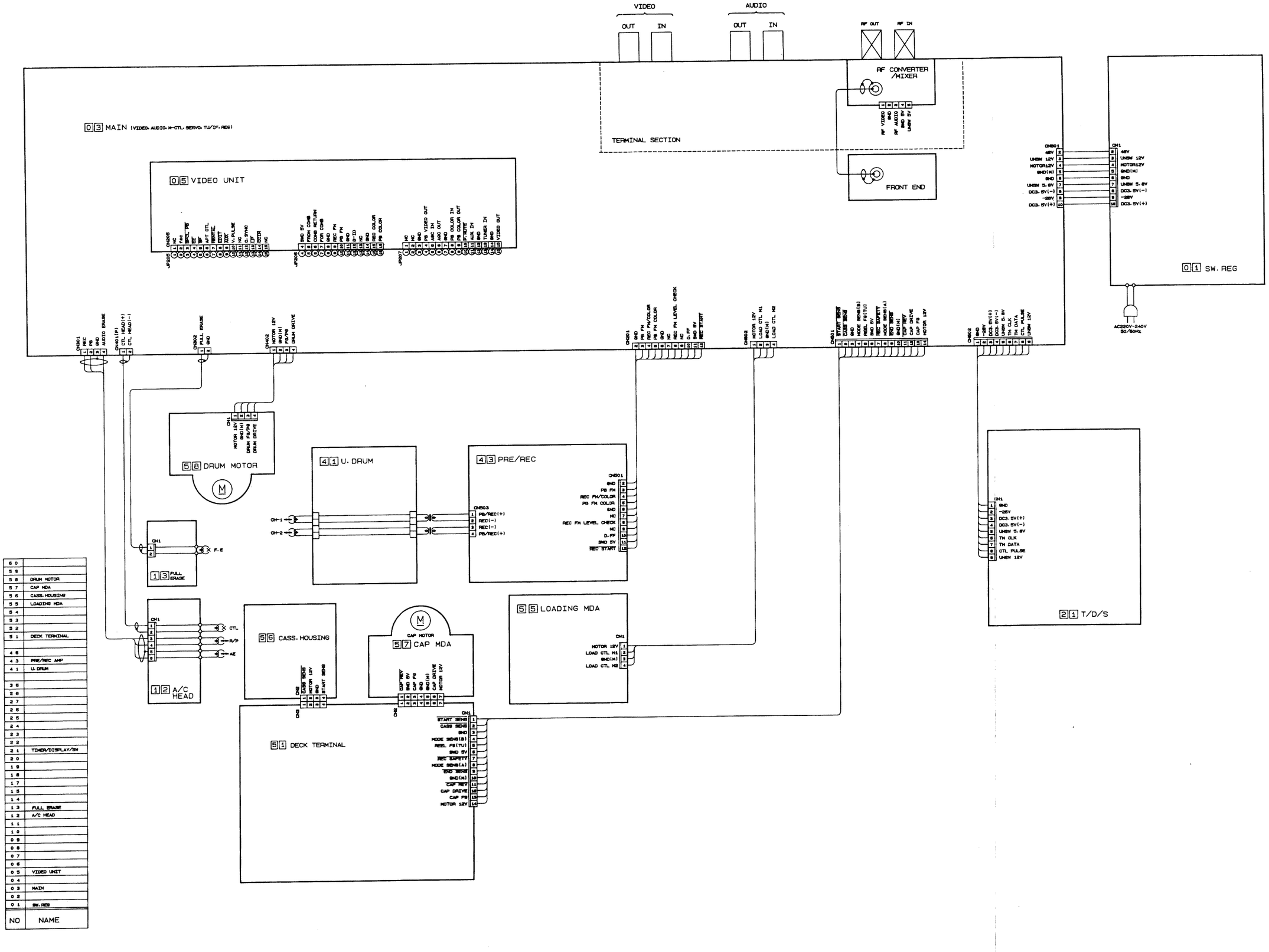
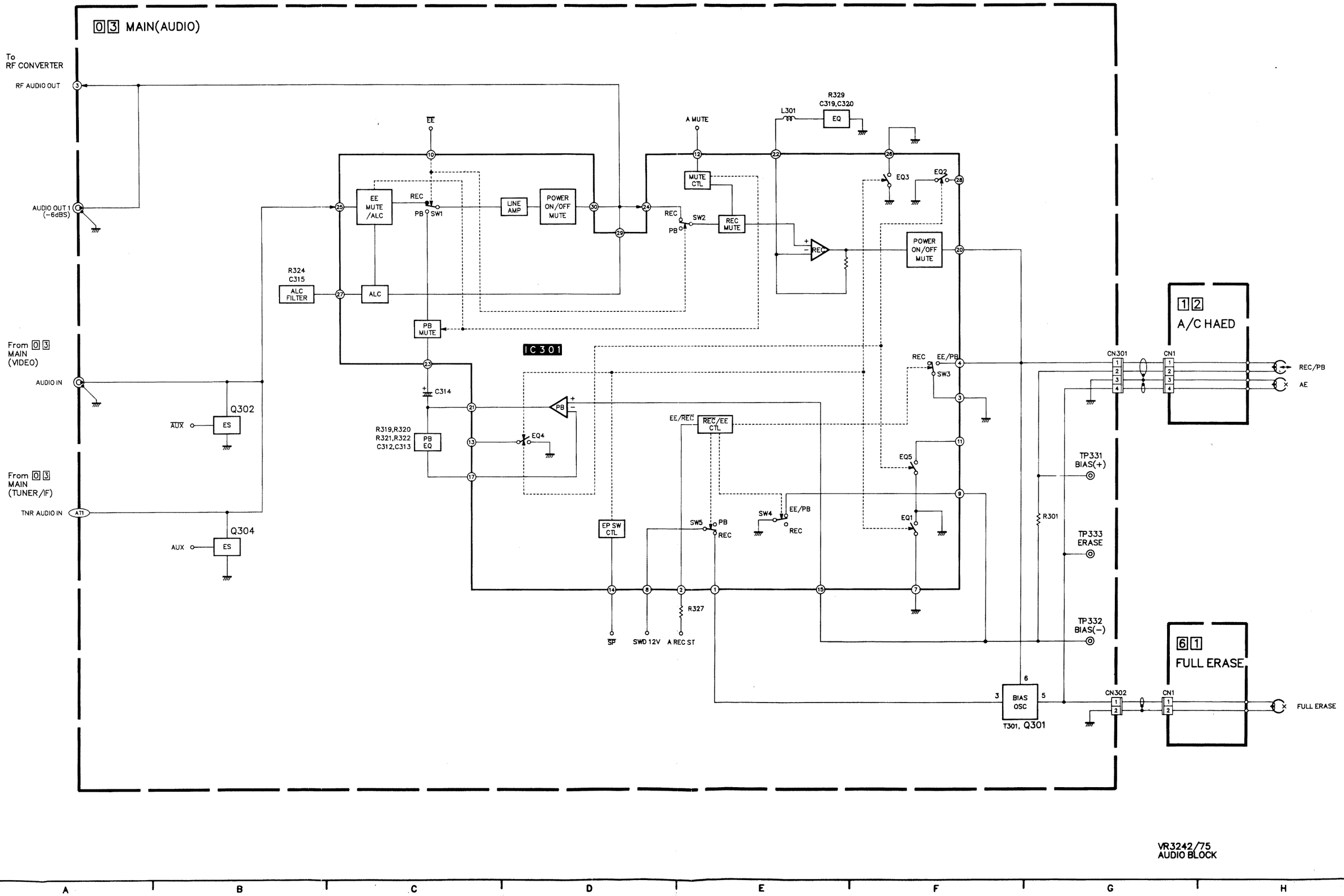
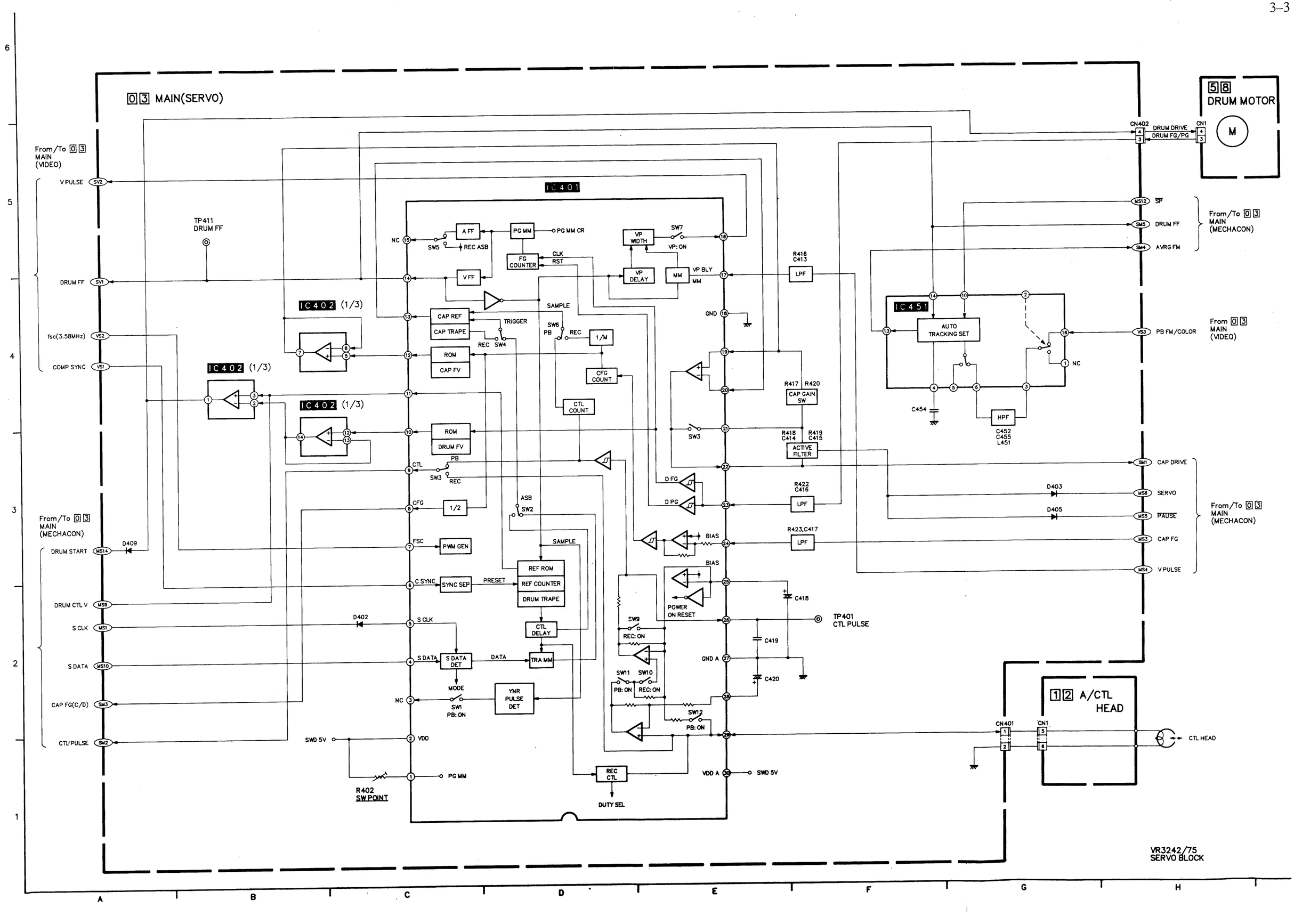
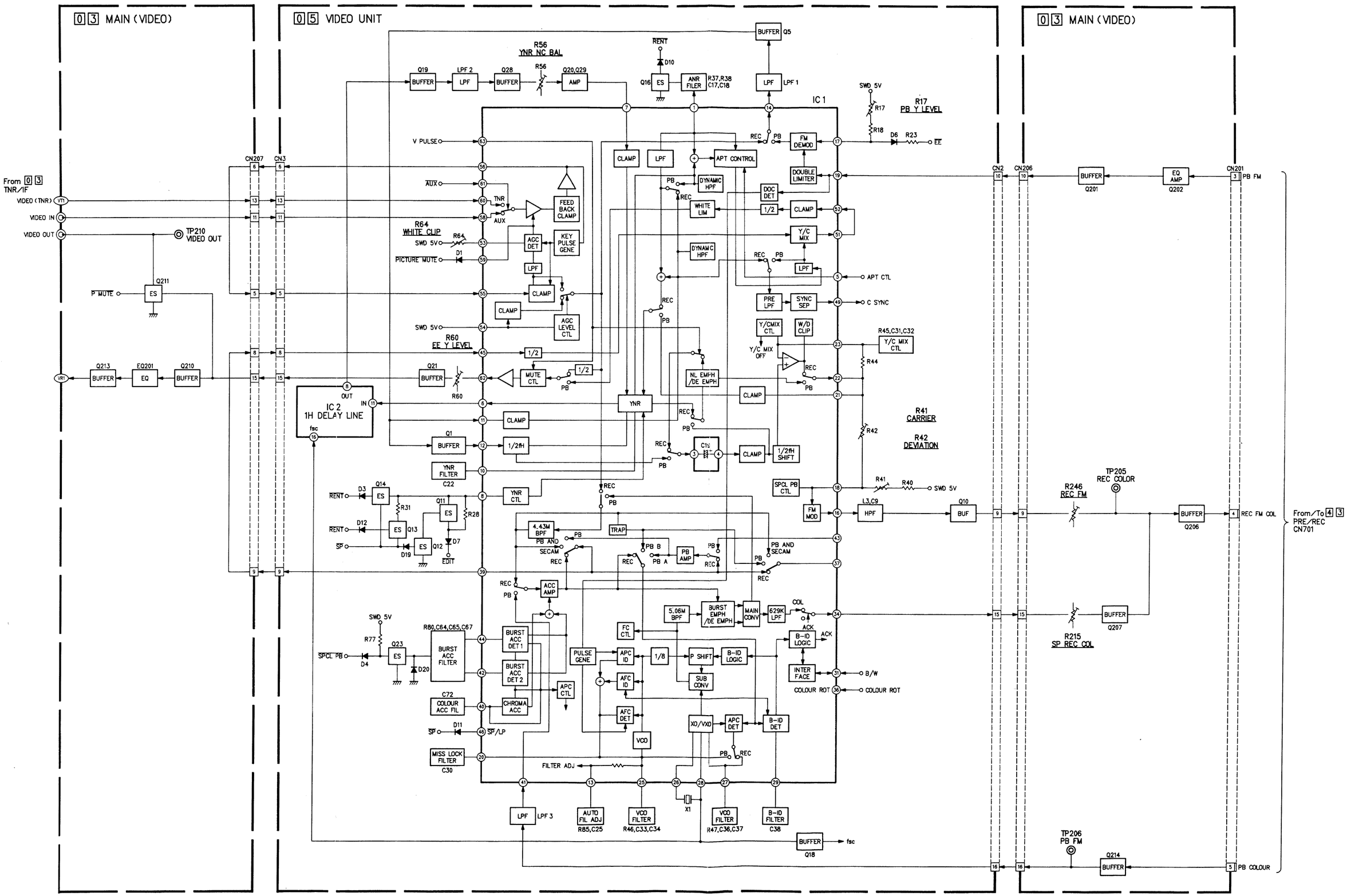
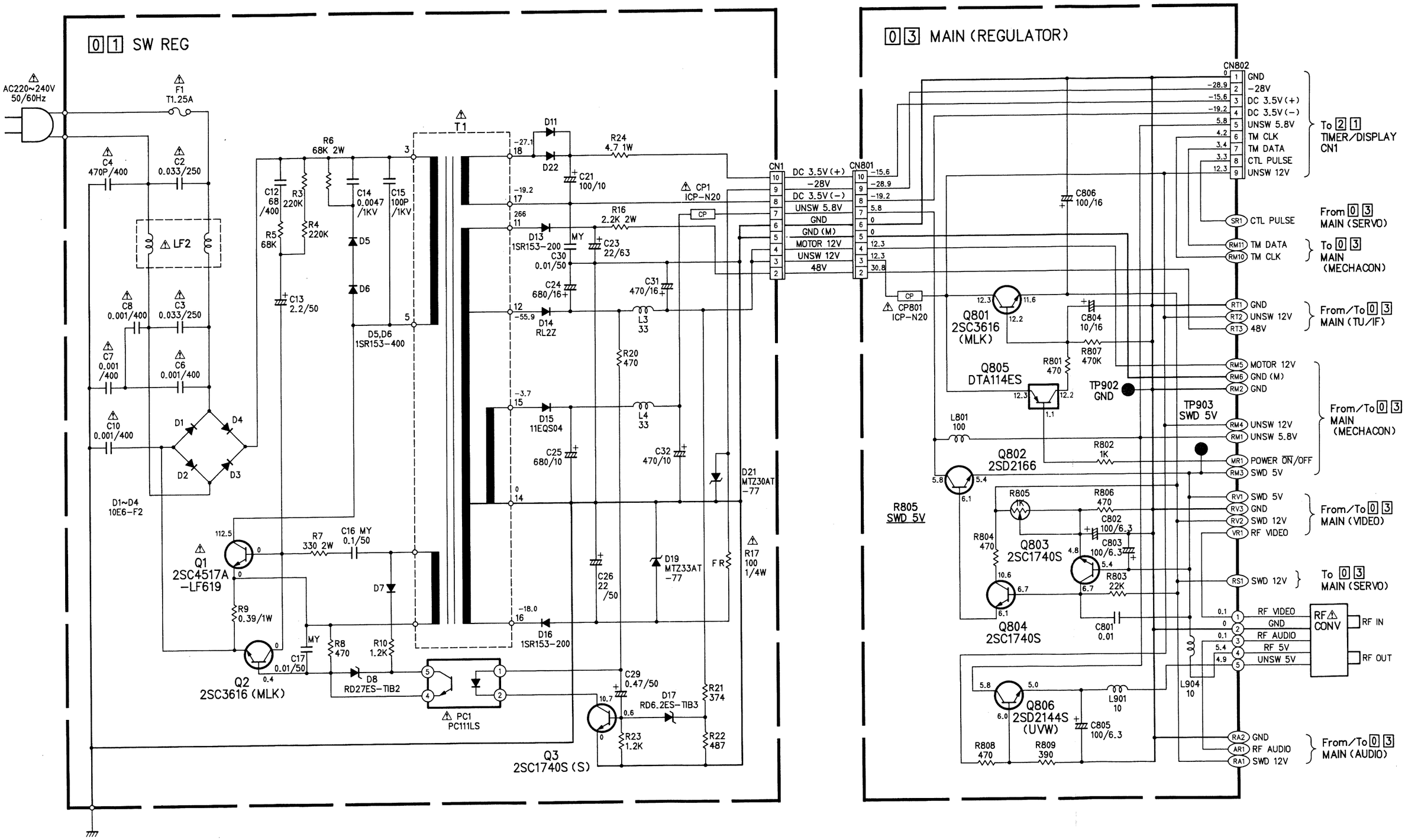


NO	NAME
60	
59	
58	DRUM MOTOR
57	CAP MDA
56	CASS. HOUSING
55	LOADING MDA
54	
53	
52	
51	DECK TERMINAL
46	
43	PRE/REC AMP
41	U. DRUM
36	
28	
27	
26	
25	
24	
23	
22	
21	TIMER/DISPLAY/SW
20	
19	
18	
17	
15	
14	
13	FULL ERASE
12	A/C HEAD
11	
10	
09	
08	
07	
06	
05	VIDEO UNIT
04	
03	MAIN
02	
01	SW. REG


03 MAIN(AUDIO)
To RF CONVERTER
RF AUDIO OUT
AUDIO OUT 1 (−6dBS)
From 03 MAIN (VIDEO)
AUDIO IN
Q302
AUX
ES
From 03 MAIN (TUNER/IF)
TNR AUDIO IN
A71
Q304
EE
EE MUTE /ALC
REC
PB
SW1
LINE AMP
POWER ON/OFF MUTE
A MUTE
MUTE CTL
L301
R329 C319,C320
EQ
EQ3
EQ2
REC MUTE
SW2
R324 C315
ALC FILTER
ALC
PB MUTE
IC301
C314
R319,R320 R321,R322 C312,C313
PB EQ
EQ4
EE/REC
REC/EE CTL
EP SW CTL
SW5
SW4
EE/PB
EQ5
EQ1
R327
R301
SP
SWD 12V
A REC ST
BIAS OSC
T301, Q301
REC
EE/PB
SW3
CN301
CN1
REC/PB
AE
TP331 BIAS(+)
TP333 ERASE
TP332 BIAS(−)
CN302
FULL ERASE
12 A/C HAED
61 FULL ERASE
VR3242/75
AUDIO BLOCK


03 MAIN(SERVO)
58 DRUM MOTOR
M
CN402
DRUM DRIVE
DRUM FG/PG
CN1
From/To 03 MAIN (VIDEO)
V PULSE
DRUM FF
fsc(3.58MHz)
COMP SYNC
TP411 DRUM FF
IC401
IC402 (1/3)
IC402 (1/3)
IC402 (1/3)
IC451
AUTO TRACKING SET
PB FM/COLOR
From 03 MAIN (VIDEO)
NC
SP
DRUM FF
AVRG FM
From/To 03 MAIN (MECHACON)
A FF
PG MM
PG MM CR
SW5
REC ASB
FG COUNTER
CLK
RST
V FF
VP WIDTH
SW7
VP: ON
VP DELAY
MM
VP BLY
MM
R416 C413
LPF
SAMPLE
CAP REF
CAP TRAPE
TRIGGER
SW6
PB
REC
REC SW4
1/M
ROM
CAP FV
CFG COUNT
CTL COUNT
GND
R417 R420
CAP GAIN SW
SW3
R418 C414
R419 C415
ACTIVE FILTER
C454
HPF
C452
C455
L451
ROM
DRUM FV
CTL
PB
SW3
REC
CFG
1/2
ASB
SW2
D FG
D PG
R422 C416
LPF
D403
D405
SM1 CAP DRIVE
MS8 SERVO
MS5 PAUSE
MS3 CAP FG
MS4 V PULSE
From/To 03 MAIN (MECHACON)
From/To 03 MAIN (MECHACON)
DRUM START
MS14
D409
FSC
PWM GEN
SAMPLE
BIAS
R423,C417
LPF
REF ROM
REF COUNTER
DRUM TRAPE
C SYNC
SYNC SEP
PRESET
BIAS
POWER ON RESET
C418
DRUM CTL V
MS9
S CLK
MS1
D402
S CLK
CTL DELAY
SW9
REC: ON
TP401 CTL PULSE
C419
S DATA
MS10
S DATA
S DATA DET
DATA
TRA MM
GND A
SW11
SW10
PB: ON
REC: ON
C420
CAP FG(C/D)
SM3
MODE
SW1
PB: ON
NC
YNR PULSE DET
SW12
PB: ON
CTL PULSE
SW2
SWD 5V
VDD
PG MM
R402
SW POINT
REC CTL
DUTY SEL
VDD A
SWD 5V
12 A/CTL HEAD
CN401
CN1
CTL HEAD
VR3242/75
SERVO BLOCK


03 MAIN (VIDEO)
05 VIDEO UNIT
03 MAIN (VIDEO)
From 03 TNR/IF
VIDEO (TNR)
VIDEO IN
VIDEO OUT
TP210 VIDEO OUT
P MUTE
Q211
ES
Q213 BUFFER
EQ201 EQ
Q210 BUFFER
CN207
CN3
IC 2 1H DELAY LINE
OUT
IN
fsc
Q19 BUFFER
LPF 2
Q28 BUFFER
R56 YNR NC BAL
Q20,Q29 AMP
RENT
D10
Q16 ES
ANR FILER
R37,R38 C17,C18
BUFFER Q5
LPF
LPF 1
IC 1
SWD 5V
R17 PB Y LEVEL
R18
D6
R23
EE
V PULSE
AUX
TNR
AUX
FEED BACK CLAMP
R64 WHITE CLIP
R64
SWD 5V
D1
PICTURE MUTE
AGC DET
KEY PULSE GENE
LPF
CLAMP
AGC LEVEL CTL
R60 EE Y LEVEL
Q21 BUFFER
R60
MUTE CTL
1/2
Q1 BUFFER
1/2fH
YNR FILTER
C22
YNR CTL
YNR
CLAMP
LPF
APT CONTROL
FM DEMOD
DOUBLE LIMITER
DOC DET
WHITE LIM
DYNAMIC HPF
Y/C MIX
PRE LPF
SYNC SEP
APT CTL
C SYNC
Y/CMIX CTL
W/D CLIP
Y/C MIX OFF
R45,C31,C32 Y/C MIX CTL
R44
NL EMPH /DE EMPH
R41 CARRIER
R42 DEVIATION
C1
1/2fH SHIFT
SPCL PB CTL
R41
R40
SWD 5V
FM MOD
L3,C9 HPF
Q10 BUF
TRAP
4.43M BPF
PB AND SECAM
PB AMP
PB B
PB A
ACC AMP
5.06M BPF
BURST EMPH /DE EMPH
MAIN CONV
629K LPF
COL
ACK
B-ID LOGIC
INTER FACE
B/W
COLOUR ROT
SWD 5V
R77
Q23 ES
D4
D20
SPCL PB
R80,C64,C65,C67 BURST ACC FILTER
BURST ACC DET 1
BURST ACC DET 2
CHROMA ACC
C72 COLOUR ACC FIL
APC CTL
FC CTL
PULSE GENE
APC ID
AFC ID
AFC DET
1/8
P SHIFT
SUB CONV
B-ID DET
XO/VXO
APC DET
VCO
D11
SP
SP/LP
MISS LOCK FILTER
C30
FILTER ADJ
D3 Q14 ES
RENT
R31
Q11 ES
R28
D12
Q13 ES
SP
D19
Q12 ES
D7
EDIT
REC
PB
CN2
CN206
BUFFER Q201
EQ AMP Q202
CN201
PB FM
TP205 REC COLOR
R246 REC FM
BUFFER Q206
REC FM COL
From/To 04 PRE/REC CN701
R215 SP REC COL
BUFFER Q207
TP206 PB FM
Q214 BUFFER
PB COLOUR
LPF LPF 3
AUTO FIL ADJ R85,C25
VCO FILTER R46,C33,C34
X1
VCO FILTER R47,C36,C37
B-ID FILTER C38
BUFFER Q18
fsc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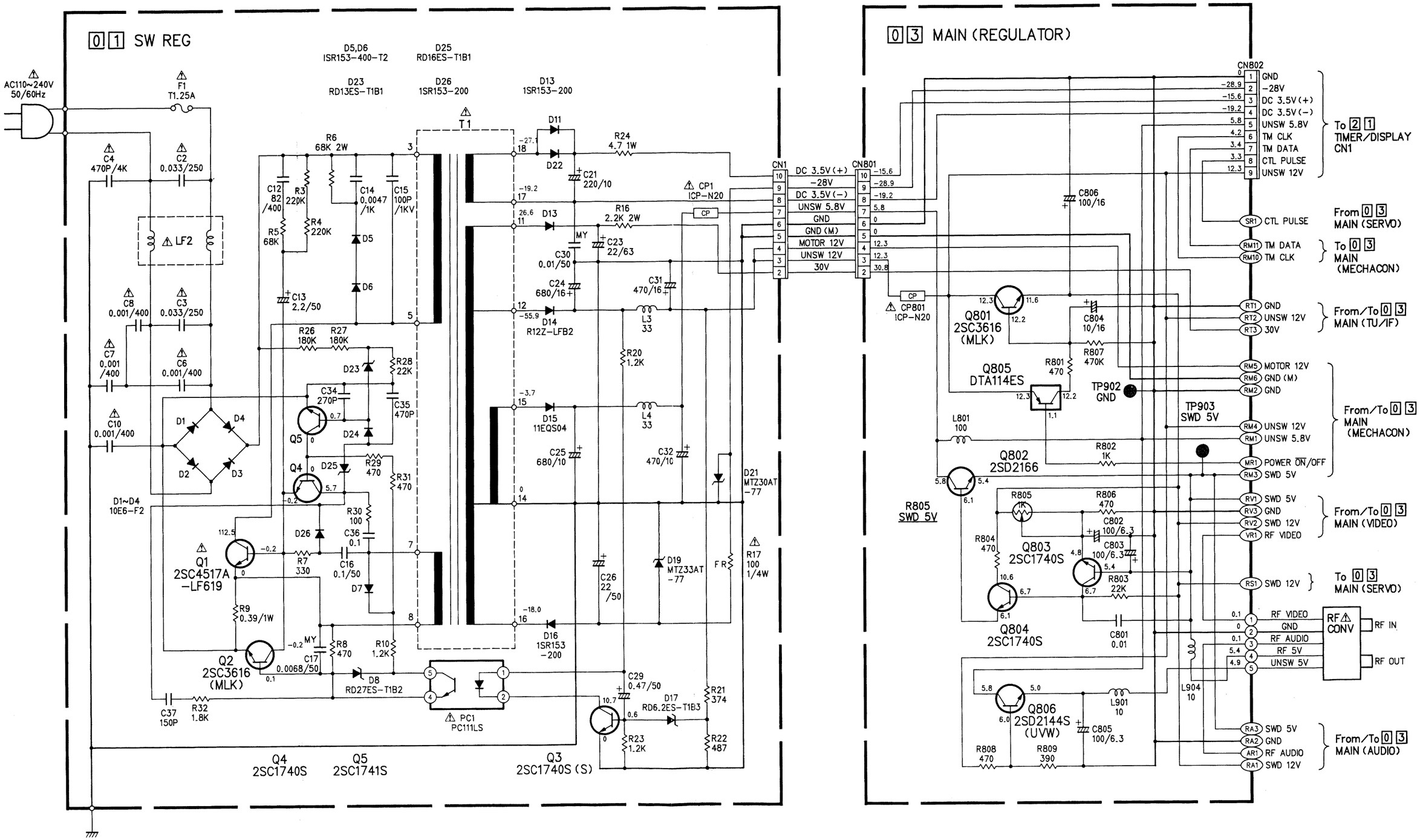
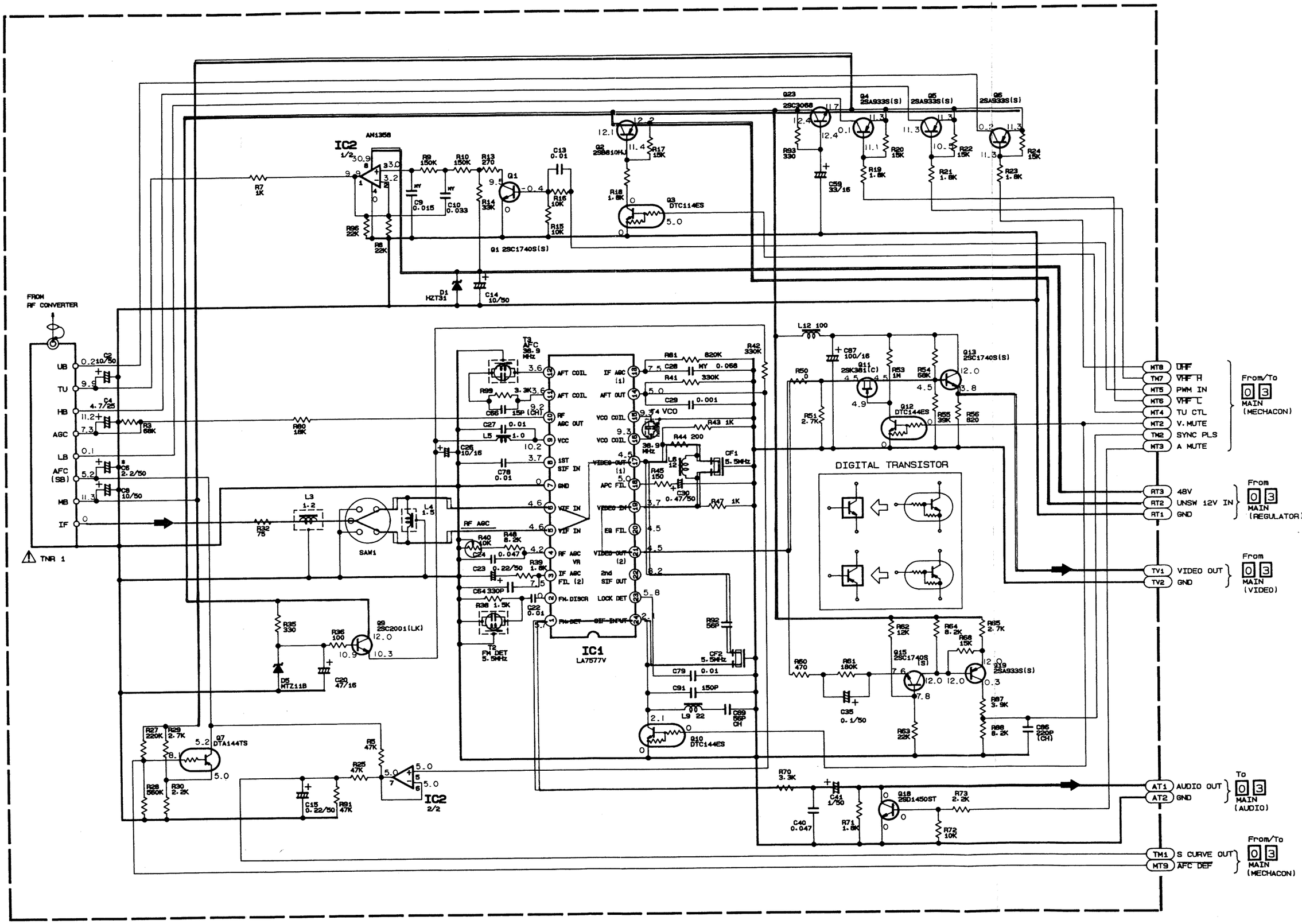
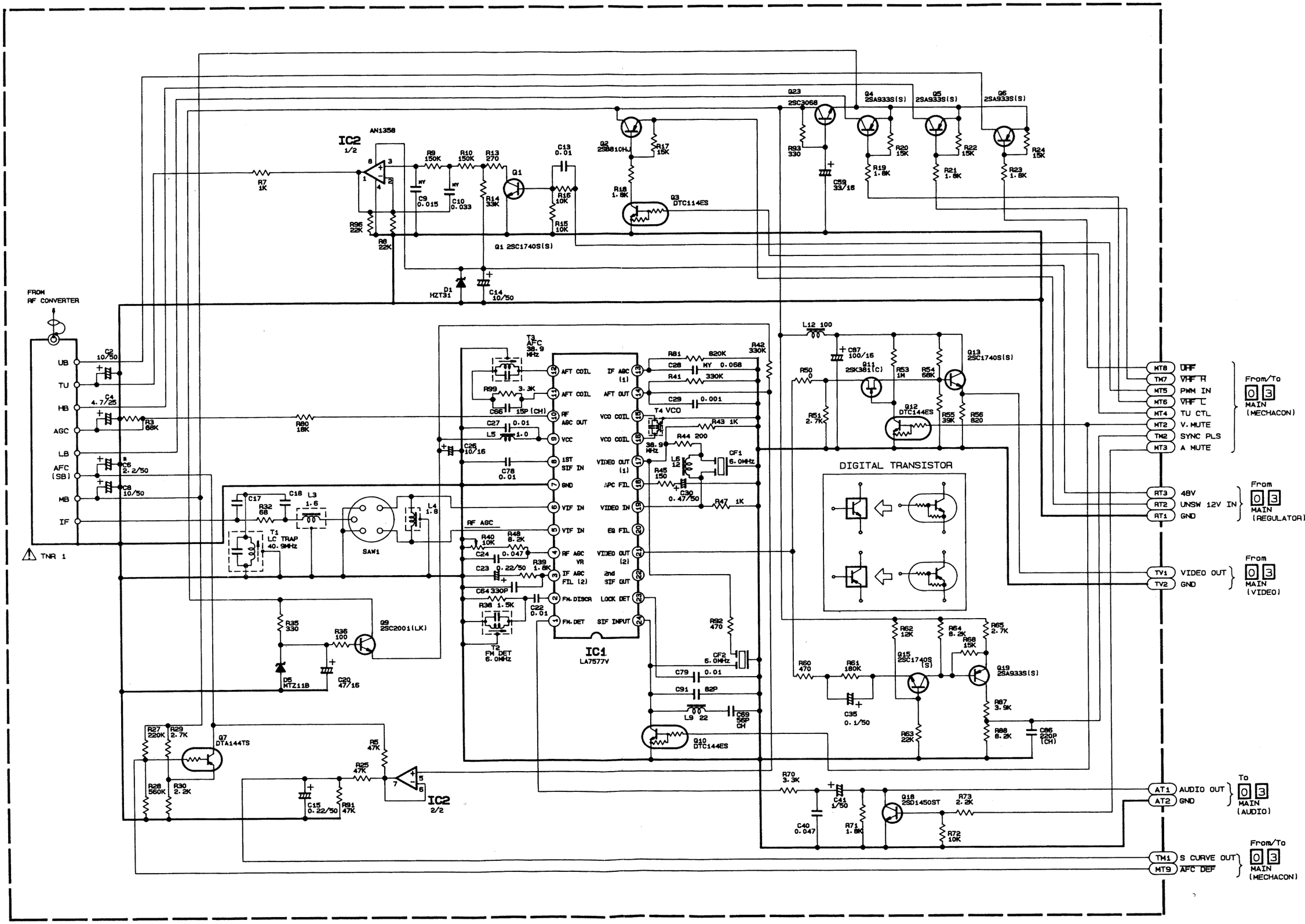
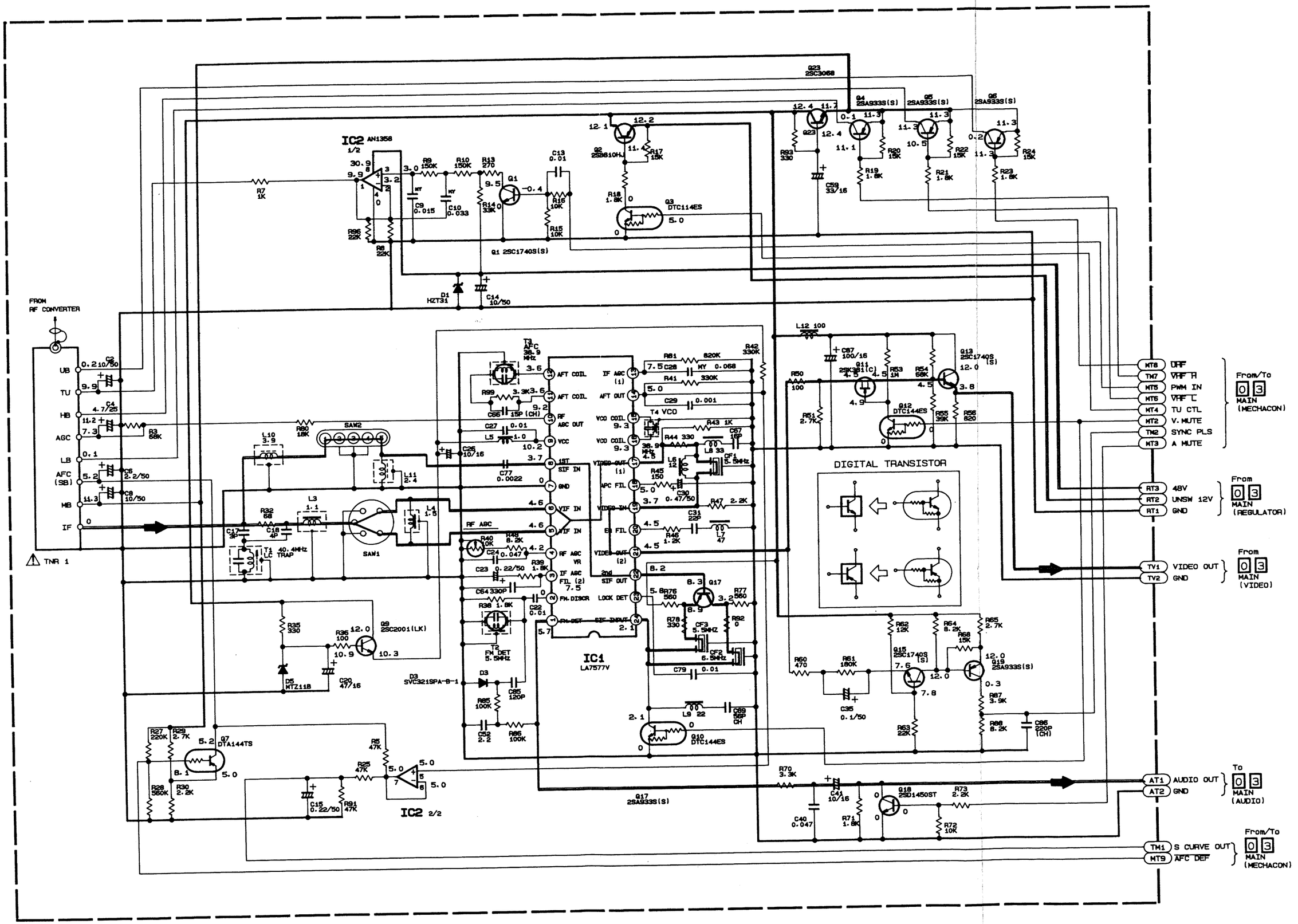
AC220~240V 50/60Hz
F1 T1.25A
C4 470P/400
C2 0.033/250
LF2
C8 0.001/400
C3 0.033/250
C7 0.001 /400
C6 0.001/400
C10 0.001/400
D1
D4
D2
D3
D1~D4 10E6-F2
T1
R6 68K 2W
C12 68 /400
R3 220K
R4 220K
R5 68K
C13 2.2/50
C14 0.0047 /1KV
C15 100P /1KV
D5
D6
D5,D6 1SR153-400
D11
D22
R24 4.7 1W
C21 100/10
CP1 ICP-N20
R16 2.2K 2W
D13 1SR153-200
C30 0.01/50
C23 22/63
C24 680/16
C31 470/16
D14 RL2Z
L3 33
R20 470
D15 11EQS04
L4 33
C25 680/10
C32 470/10
D21 MTZ30AT -77
R17 100 1/4W
C26 22 /50
D19 MTZ33AT -77
D16 1SR153-200
Q1 2SC4517A -LF619
R7 330 2W
C16 MY 0.1/50
D7
R9 0.39/1W
C17 0.01/50
R8 470
R10 1.2K
D8 RD27ES-T1B2
PC1 PC111LS
Q2 2SC3616 (MLK)
C29 0.47/50
D17 RD6.2ES-T1B3
R21 374
R23 1.2K
R22 487
Q3 2SC1740S (S)
CN1
DC 3.5V(+)
-28V
DC 3.5V(-)
UNSW 5.8V
GND
GND (M)
MOTOR 12V
UNSW 12V
48V
CN801
CP
CP801 ICP-N20
03 MAIN (REGULATOR)
CN802
GND
-28V
DC 3.5V(+)
DC 3.5V(-)
UNSW 5.8V
TM CLK
TM DATA
CTL PULSE
UNSW 12V
To 02 01 TIMER/DISPLAY CN1
C806 100/16
SR1 CTL PULSE
From 03 MAIN (SERVO)
RM11 TM DATA
RM10 TM CLK
To 03 MAIN (MECHACON)
Q801 2SC3616 (MLK)
C804 10/16
R807 470K
RT1 GND
RT2 UNSW 12V
RT3 48V
From/To 03 MAIN (TU/IF)
Q805 DTA114ES
R801 470
TP902 GND
TP903 SWD 5V
RM5 MOTOR 12V
RM6 GND (M)
RM2 GND
L801 100
Q802 2SD2166
R802 1K
RM4 UNSW 12V
RM1 UNSW 5.8V
MR1 POWER ON/OFF
RM3 SWD 5V
From/To 03 MAIN (MECHACON)
R805 SWD 5V
R805 1K
R806 470
C802 100/6.3
R804 470
Q803 2SC1740S
C803 100/6.3
R803 22K
RV1 SWD 5V
RV3 GND
RV2 SWD 12V
VR1 RF VIDEO
From/To 03 MAIN (VIDEO)
RS1 SWD 12V
To 03 MAIN (SERVO)
Q804 2SC1740S
C801 0.01
RF CONV
RF IN
RF OUT
L904 10
RF VIDEO
GND
RF AUDIO
RF 5V
UNSW 5V
Q806 2SD2144S (UVW)
L901 10
C805 100/6.3
R808 470
R809 390
RA2 GND
AR1 RF AUDIO
RA1 SWD 12V
From/To 03 MAIN (AUDIO)

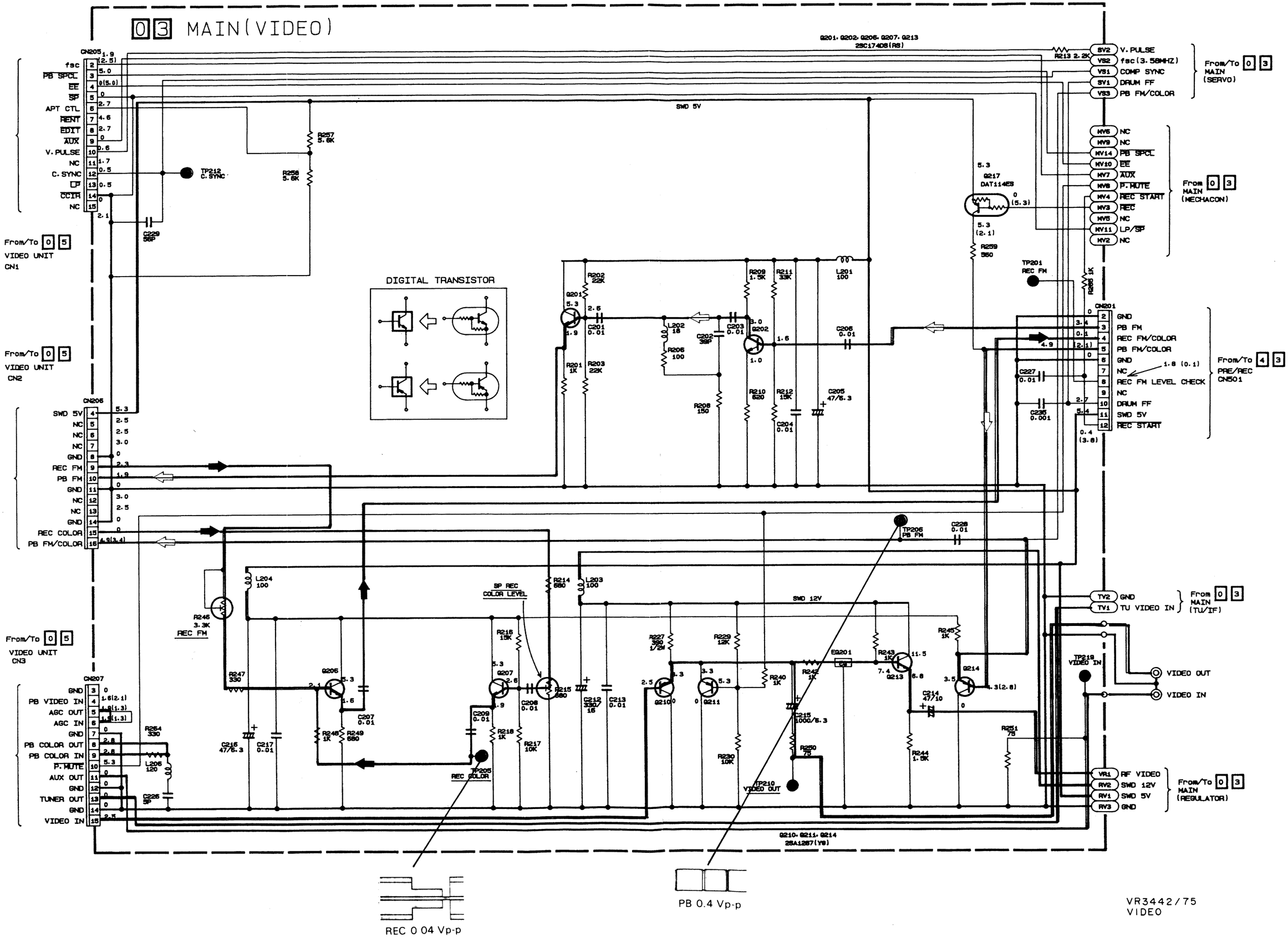

01 SW REG
03 MAIN (REGULATOR)
AC110~240V 50/60Hz
F1 T1.25A
D5,D6 ISR153-400-T2
D23 RD13ES-T1B1
D25 RD16ES-T1B1
D26 1SR153-200
D13 1SR153-200
T1
LF2
D1~D4 10E6-F2
Q1 2SC4517A -LF619
Q2 2SC3616 (MLK)
Q4 2SC1740S
Q5 2SC1741S
Q3 2SC1740S (S)
D8 RD27ES-T1B2
D14 R12Z-LFB2
D15 11EQS04
D16 1SR153-200
D17 RD6.2ES-T1B3
D19 MTZ33AT -77
D21 MTZ30AT -77
D22
PC1 PC111LS
CP1 ICP-N20
CP801 ICP-N20
CN1
CN801
DC 3.5V(+)
-28V
DC 3.5V(-)
UNSW 5.8V
GND
GND (M)
MOTOR 12V
UNSW 12V
30V
Q801 2SC3616 (MLK)
Q802 2SD2166
Q803 2SC1740S
Q804 2SC1740S
Q805 DTA114ES
Q806 2SD2144S (UVW)
TP902 GND
TP903 SWD 5V
R805 SWD 5V
CN802
GND
-28V
DC 3.5V(+)
DC 3.5V(-)
UNSW 5.8V
TM CLK
TM DATA
CTL PULSE
UNSW 12V
To 2 1 TIMER/DISPLAY CN1
From 0 3 MAIN (SERVO)
To 0 3 MAIN (MECHACON)
From/To 0 3 MAIN (TU/IF)
From/To 0 3 MAIN (MECHACON)
From/To 0 3 MAIN (VIDEO)
To 0 3 MAIN (SERVO)
From/To 0 3 MAIN (AUDIO)
RF CONV
RF IN
RF OUT
RF VIDEO
RF AUDIO
RF 5V
POWER ON/OFF
SWD 5V
SWD 12V


IC2
1/2
AN1358
Q1 2SC1740S(S)
Q2 2SB810HJ
Q3 DTC114ES
Q23 2SC3068
Q4 2SA933S(S)
Q5 2SA933S(S)
Q6 2SA933S(S)
D1 HZT31
FROM RF CONVERTER
TNR 1
SAW1
T3 AFC 38.9 MHz
T2 FM DET 5.5MHz
IC1 LA7577V
IC2 2/2
CF1 5.5MHz
CF2 5.5MHz
Q7 DTA144TS
Q9 2SC2001(LK)
Q10 DTC144ES
Q11 2SK381(C)
Q12 DTC144ES
Q13 2SC1740S(S)
Q15 2SC1740S(S)
Q19 2SA933S(S)
DIGITAL TRANSISTOR
AFT COIL
RF AGC OUT
VCC
1ST IF IN
GND
VIF IN
RF AGC
IF AGC FIL (2)
FM DISCR
FM DET
IF AGC (1)
AFT OUT
VCO COIL
VIDEO OUT (1)
APC FIL
VIDEO IN
EQ FIL
VIDEO OUT (2)
2nd IF OUT
LOCK DET
SIF INPUT
MT8 UHF
MT7 VHF H
MT5 PWM IN
MT6 VHF L
MT4 TU CTL
MT2 V. MUTE
TM2 SYNC PLS
MT3 A MUTE
From/To 0 3 MAIN (MECHACON)
RT3 48V
RT2 UNSW 12V IN
RT1 GND
From 0 3 MAIN (REGULATOR)
TV1 VIDEO OUT
TV2 GND
From 0 3 MAIN (VIDEO)
AT1 AUDIO OUT
AT2 GND
To 0 3 MAIN (AUDIO)
TM1 S CURVE OUT
MT9 AFC DEF
From/To 0 3 MAIN (MECHACON)


FROM RF CONVERTER
UB
TU
HB
AGC
LB
AFC (SB)
MB
IF
C2 10/50
C4 4.7/25
R3 68K
C6 2.2/50
C8 10/50
TNR 1
C17
C18
L3 1.6
R32 68
T1 LC TRAP 40.9MHz
SAW1
L4 1.8
IC2 1/2
AN1358
R7 1K
R9 150K
R10 150K
R13 270
C13 0.01
C9 0.015
C10 0.033
R14 33K
Q1
R15 10K
R96 22K
R8 22K
Q1 2SC1740S(S)
Q2 2SB810HJ
R17 15K
R16 1.8K
Q3 DTC114ES
D1 HZT31
C14 10/50
Q23 2SC3068
R93 330
C59 33/16
Q4 2SA933S(S)
Q5 2SA933S(S)
Q6 2SA933S(S)
R20 15K
R19 1.8K
R22 15K
R21 1.8K
R24 15K
R23 1.8K
T3 AFC 38.9 MHz
AFT COIL
AFT COIL
RF AGC OUT
VCC
1ST SIF IN
GND
VIF IN
VIF IN
RF AGC VR
IF AGC FIL (2)
FM DISCR
FM DET
IF AGC (1)
AFT OUT
VCO COIL
VCO COIL
VIDEO OUT (1)
APC FIL
VIDEO IN
EQ FIL
VIDEO OUT (2)
2nd SIF OUT
LOCK DET
SIF INPUT
R99 3.3K
C66 15P (CH)
C27 0.01
L5 1.0
C26 10/16
C78 0.01
RF AGC
R40 10K
R48 8.2K
C24 0.047
R39 1.8K
C23 0.22/50
C54 330P
R38 1.5K
C22 0.01
T2 FM DET 6.0MHz
IC1 LA7577V
R80 18K
R81 820K
C28 MY 0.068
R41 330K
C29 0.001
T4 VCO
R43 1K
R44 200
38.9 MHz
CF1 6.0MHz
L6 12
R45 150
C30 0.47/50
R47 1K
R42 330K
R92 470
CF2 6.0MHz
C79 0.01
C91 82P
L9 22
C69 56P CH
Q10 DTC144ES
L12 100
C87 100/16
Q11 2SK381(C)
R50 0
R51 2.7K
R53 1M
R54 68K
Q12 DTC144ES
Q13 2SC1740S(S)
R55 39K
R56 820
DIGITAL TRANSISTOR
R35 330
R36 100
Q9 2SC2001(LK)
D5 MTZ11B
C20 47/16
R27 220K
R29 2.7K
Q7 DTA144TS
R28 560K
R30 2.2K
R5 47K
R25 47K
C15 0.22/50
R91 47K
IC2 2/2
R62 12K
R64 8.2K
R65 2.7K
R68 15K
R60 470
R61 180K
Q15 2SC1740S (S)
Q19 2SA933S(S)
C35 0.1/50
R63 22K
R87 3.9K
R88 8.2K
C96 220P (CH)
R70 3.3K
C41 1/50
C40 0.047
R71 1.8K
Q18 2SD1450ST
R73 2.2K
R72 10K
MT8 UHF
TM7 VHF H
MT5 PWM IN
MT6 VHF L
MT4 TU CTL
MT2 V. MUTE
TM2 SYNC PLS
MT3 A MUTE
From/To 03 MAIN (MECHACON)
RT3 48V
RT2 UNSW 12V IN
RT1 GND
From 03 MAIN (REGULATOR)
TV1 VIDEO OUT
TV2 GND
From 03 MAIN (VIDEO)
AT1 AUDIO OUT
AT2 GND
To 03 MAIN (AUDIO)
TM1 S CURVE OUT
MT9 AFC DEF
From/To 03 MAIN (MECHACON)


IC2 AN1358 1/2
IC1 LA7577V
IC2 2/2
Q1 2SC1740S(S)
Q2 2SB610H
Q3 DTC114ES
Q4 2SA933S(S)
Q5 2SA933S(S)
Q6 2SA933S(S)
Q23 2SC3068
Q7 DTA144TS
Q9 2SC2001(LK)
Q10 DTC144ES
Q11 2SK381(C)
Q12 DTC144ES
Q13 2SC1740S(S)
Q15 2SC1740S(S)
Q16 2SA933S(S)
Q17 2SA933S(S)
Q18 2SD1450ST
D1 HZT3I
D3 SVC321SPA-B-1
D5 MTZ11B
T1 LC TRAP 40.4MHz
T2 FM DET 5.5MHz
T3 AFC 38.9 MHz
T4 VCO
SAW1
SAW2
DIGITAL TRANSISTOR
FROM RF CONVERTER
TNR 1
MT8 DAF
MT7 VHF H
MT5 PWM IN
MT6 VHF L
MT4 TU CTL
MT2 V.MUTE
TM2 SYNC PLS
MT3 A MUTE
From/To 0 3 MAIN (MECHACON)
RT3 48V
RT2 UNSW 12V
RT1 GND
From 0 3 MAIN (REGULATOR)
TV1 VIDEO OUT
TV2 GND
From 0 3 MAIN (VIDEO)
AT1 AUDIO OUT
AT2 GND
To 0 3 MAIN (AUDIO)
TM1 S CURVE OUT
MT9 AFC DEF
From/To 0 3 MAIN (MECHACON)

03 MAIN(VIDEO)



VR3442/75
VIDEO

03 MAIN(VIDEO)

CN205: fsc 2, PB SPCL 3, EE 4, SP 5, APT CTL 6, RENT 7, EDIT 8, AUX 9, V.PULSE 10, NC 11, C.SYNC 12, CP 13, CCIR 14, NC 15

From/To 05 VIDEO UNIT CN1

From/To 05 VIDEO UNIT CN2

CN206: SWD 5V 4, NC 5, NC 6, NC 7, GND 8, REC FM 9, PB FM 10, GND 11, NC 12, NC 13, GND 14, REC COLOR 15, PB FM/COLOR 16

From/To 05 VIDEO UNIT CN3

CN207: GND 3, PB VIDEO IN 4, AGC OUT 5, AGC IN 6, GND 7, PB COLOR OUT 8, PB COLOR IN 9, P.MUTE 10, AUX OUT 11, GND 12, TUNER OUT 13, GND 14, VIDEO IN 15

TP212 C.SYNC

C229 56P

R257 5.6K

R258 5.6K

DIGITAL TRANSISTOR

Q201 R202 22K, R201 1K, R203 22K, C201 0.01

L202 18, R205 100, C202 39P, C203 0.01

Q202 R209 1.5K, R211 33K, R210 620, R212 15K, C204 0.01, C205 47/6.3

L201 100, C206 0.01

Q201·Q202·Q206·Q207·Q213 2SC1740S(RS)

Q217 DAT114ES, R259 560

TP201 REC FM

R213 2.2K, R265 1K

SV2 V.PULSE, VS2 fsc(3.58MHZ), VS1 COMP SYNC, SV1 DRUM FF, VS3 PB FM/COLOR — From/To 03 MAIN (SERVO)

MV6 NC, MV9 NC, MV14 PB SPCL, MV10 EE, MV7 AUX, MV8 P.MUTE, MV4 REC START, MV3 REC, MV5 NC, MV11 LP/SP, MV2 NC — From 03 MAIN (MECHACON)

CN201: 2 GND, 3 PB FM, 4 REC FM/COLOR, 5 PB FM/COLOR, 6 GND, 7 NC, 8 REC FM LEVEL CHECK, 9 NC, 10 DRUM FF, 11 SWD 5V, 12 REC START — From/To 43 PRE/REC CN501

C227 0.01, C235 0.001

TP205 PB FM, C228 0.01

L204 100, R246 3.3K REC FM

SP REC COLOR LEVEL

R214 680, L203 100

R216 15K, R215 680, C208 0.01, C212 330/16, C213 0.01

R227 390 1/2W, R229 12K, R240 1K, R242 1K, R243 1K, Q213, R245 1K, Q214

C214 47/10, C215 1000/6.3, R250 75, R244 1.5K, R251 75

R247 330, Q206, C207 0.01, R248 1K, R249 680, C216 47/6.3, C217 0.01

Q207, C209 0.01, R218 1K, R217 10K, TP205 REC COLOR

Q210, Q211, R230 10K, TP210 VIDEO OUT

R254 330, L205 120, C225 5P

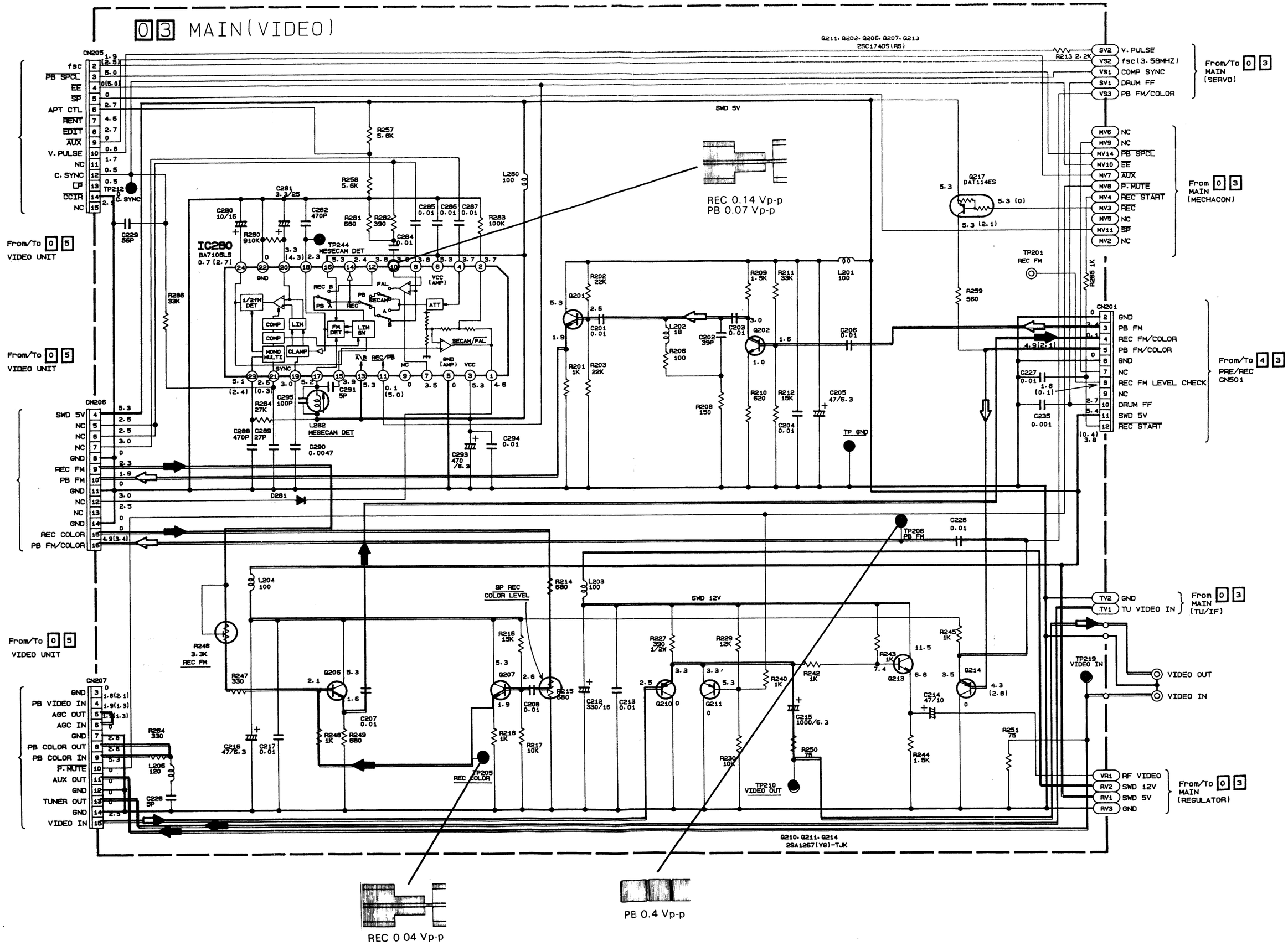
TV2 GND, TV1 TU VIDEO IN — From 03 MAIN (TU/IF)

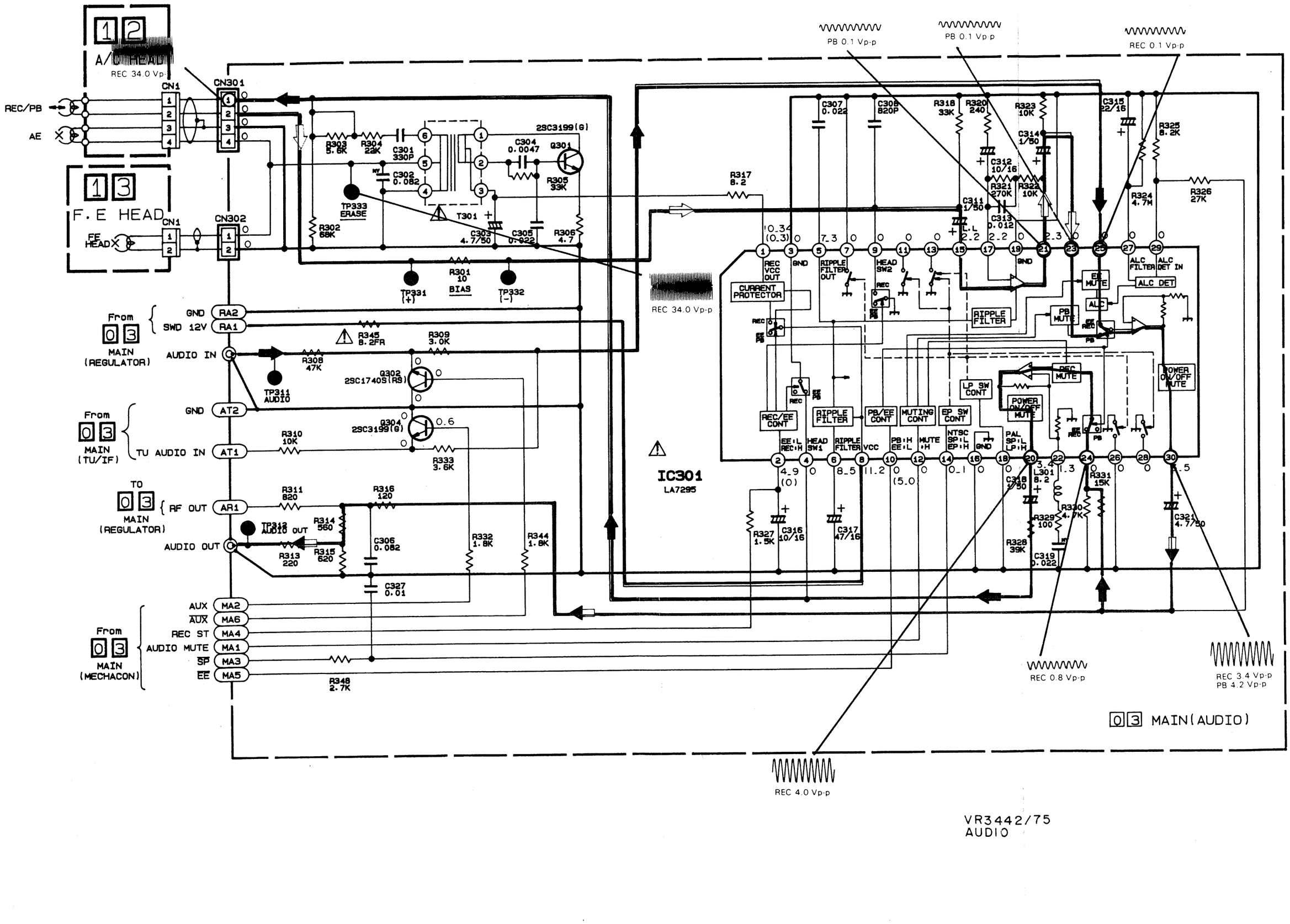
TP219 VIDEO IN — VIDEO OUT, VIDEO IN

VR1 RF VIDEO, RV2 SWD 12V, RV1 SWD 5V, RV3 GND — From/To 03 MAIN (REGULATOR)

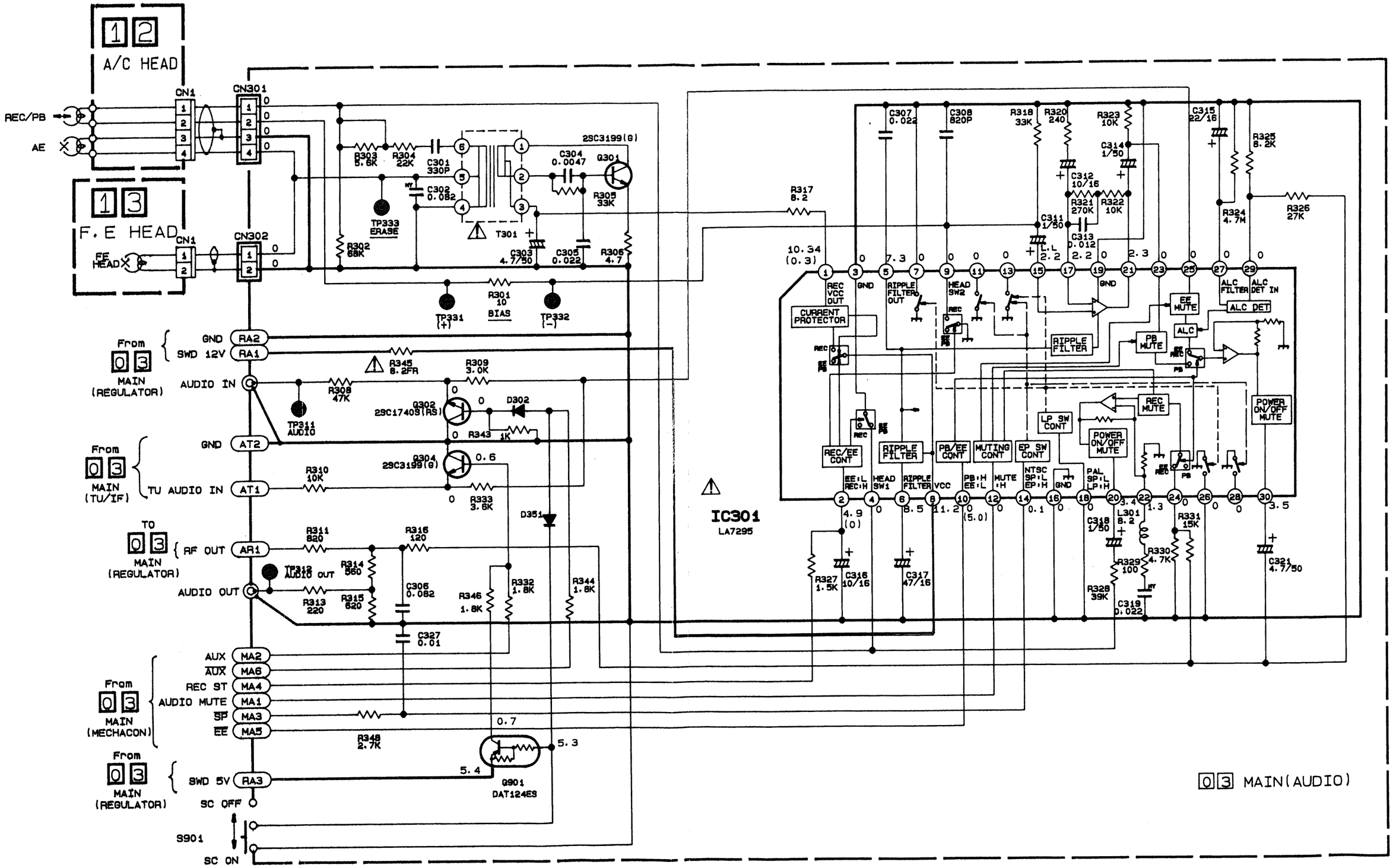
Q210·Q211·Q214 2SA1267(YS)

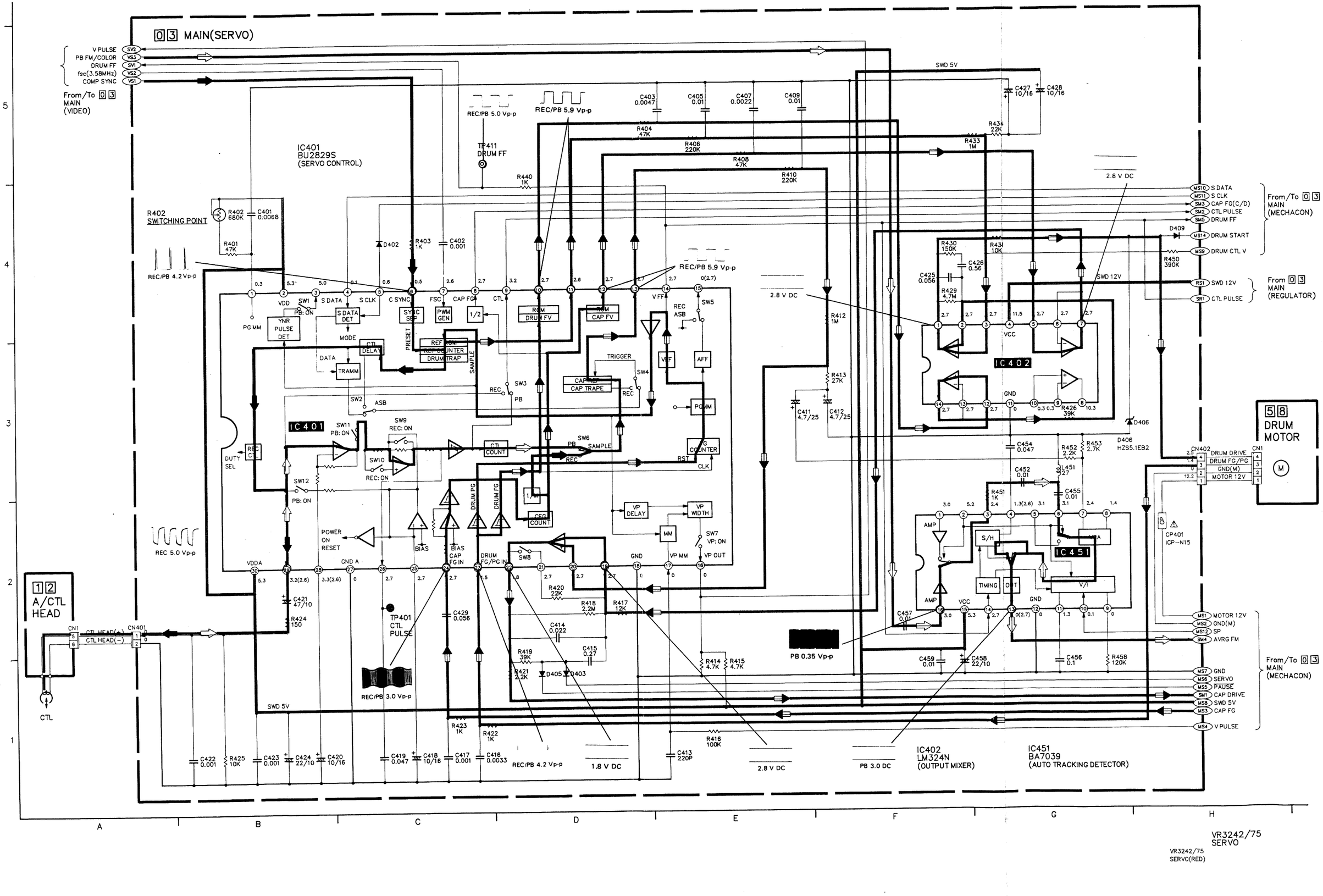
03 MAIN(VIDEO)

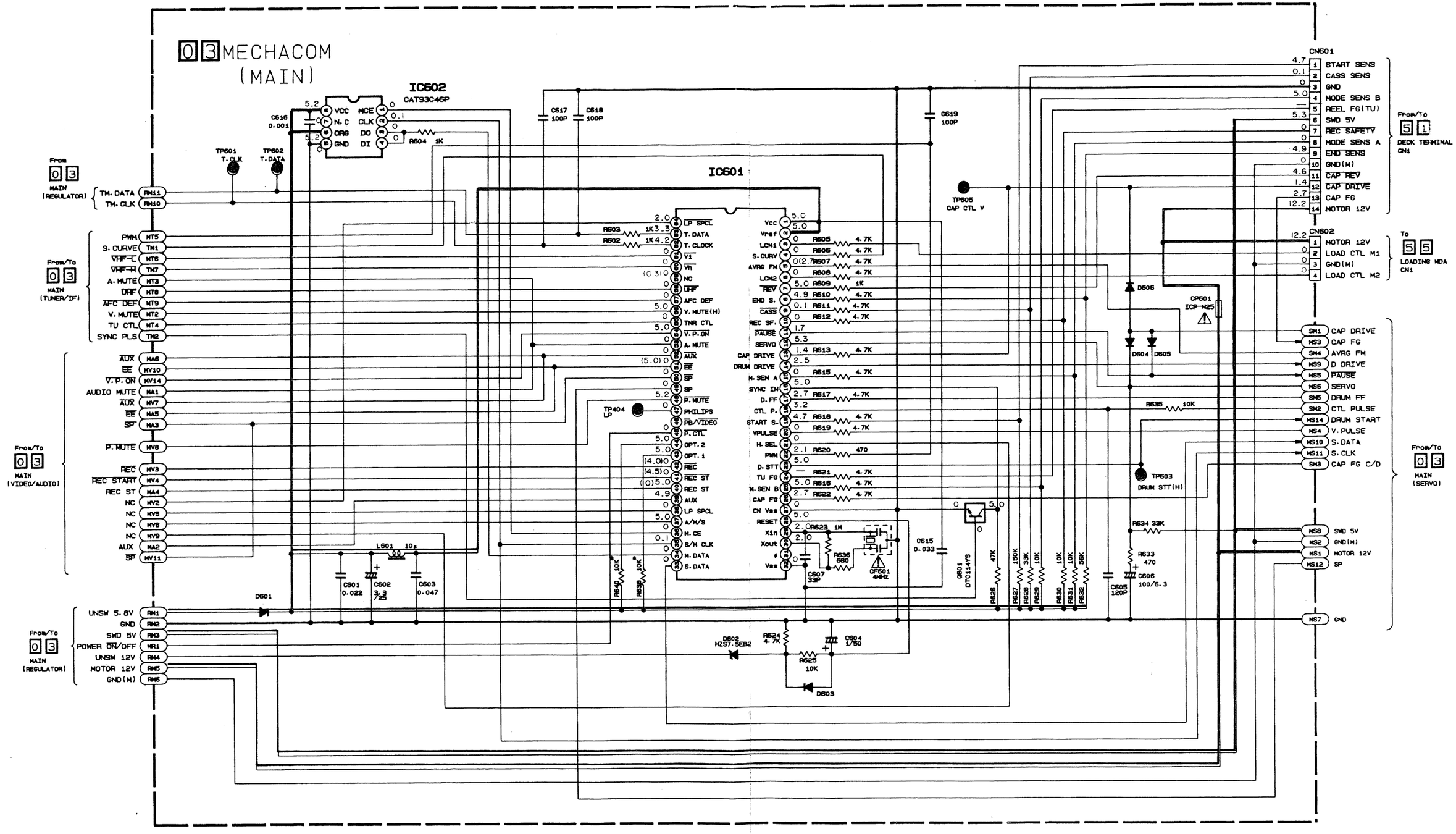


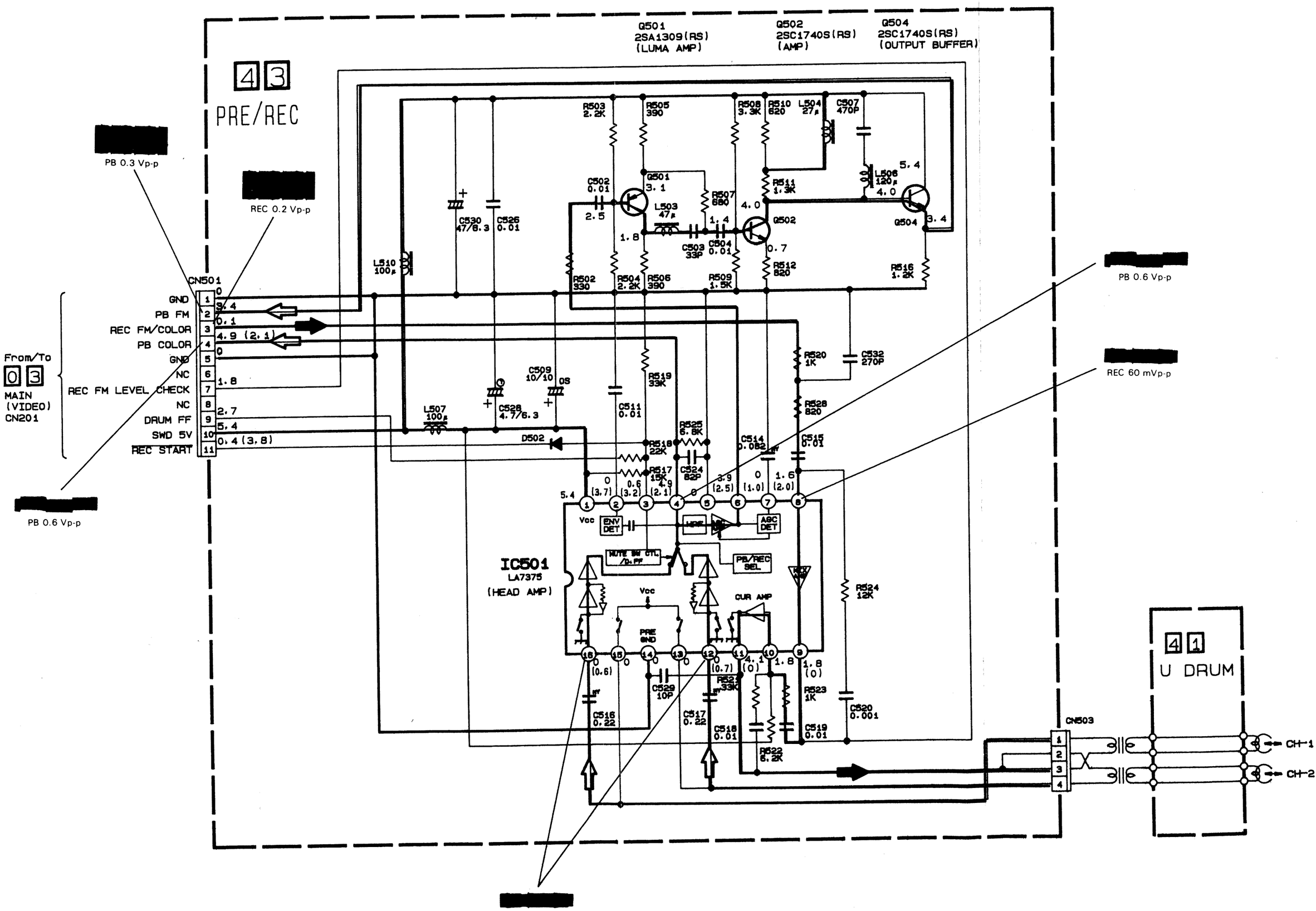


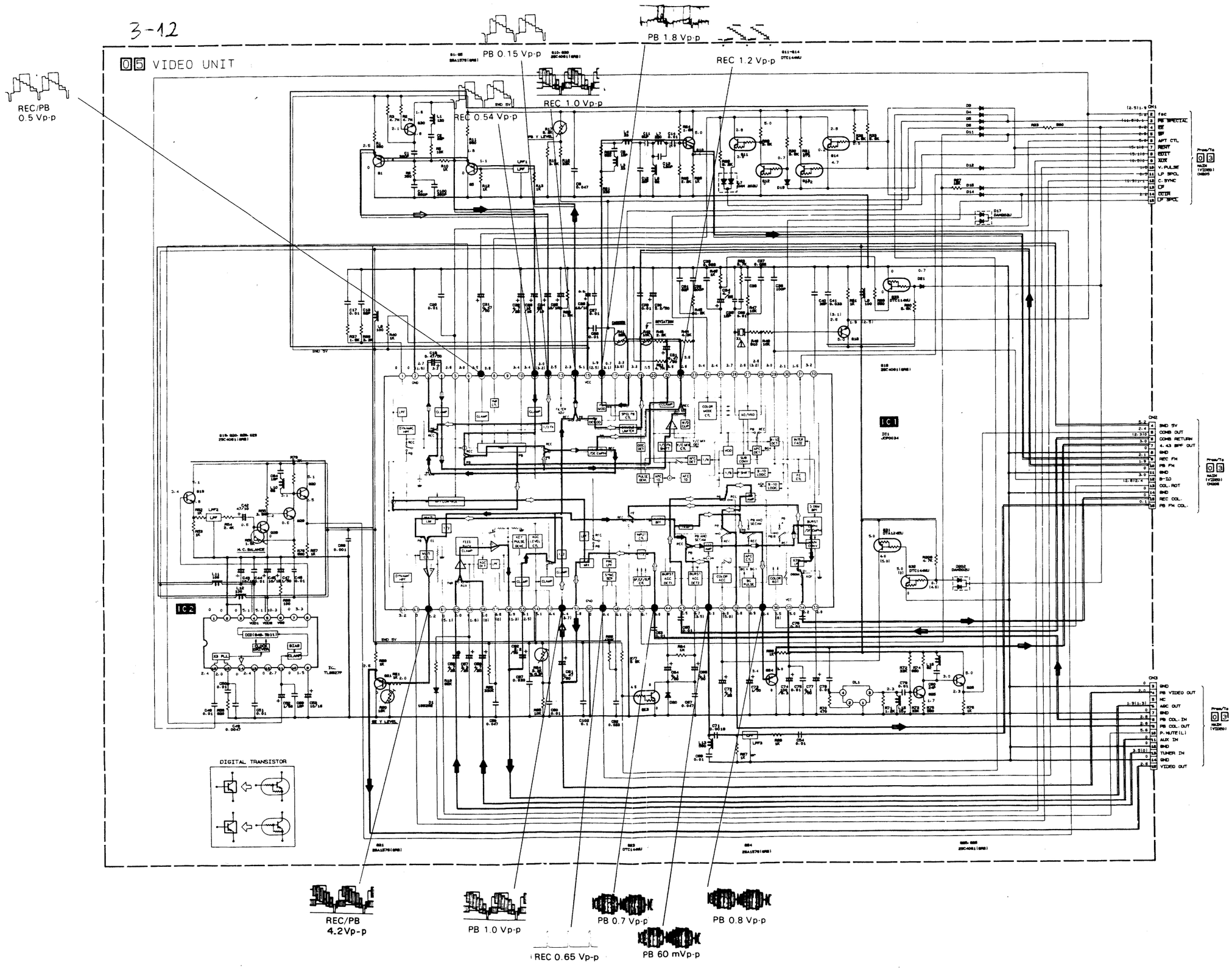
VR3442/75
AUDIO


12
A/C HEAD
13
F.E HEAD
CN1
CN301
CN302
REC/PB
AE
FE HEAD
R303 5.6K
R304 22K
C301 330P
C302 0.082
2SC3199(G)
Q301
C304 0.0047
R305 33K
R306 4.7
R302 68K
T301
C303 4.7/50
C305 0.022
TP333 ERASE
TP331 (+)
TP332 (-)
R301 10 BIAS
From 03 MAIN (REGULATOR)
GND RA2
SWD 12V RA1
AUDIO IN
R345 8.2FR
R309 3.0K
R308 47K
TP311 AUDIO
Q302 2SC1740S(RS)
D302
R343 1K
From 03 MAIN (TU/IF)
GND AT2
TU AUDIO IN AT1
Q304 2SC3199(G)
R310 10K
R333 3.6K
D351
TO 03 MAIN (REGULATOR)
RF OUT AR1
R311 820
R316 120
R314 560
TP312 AUDIO OUT
AUDIO OUT
R313 220
R315 620
C306 0.082
C327 0.01
R346 1.8K
R332 1.8K
R344 1.8K
From 03 MAIN (MECHACON)
AUX MA2
AUX MA6
REC ST MA4
AUDIO MUTE MA1
SP MA3
EE MA5
R348 2.7K
0.7
5.3
5.4
Q901 DAT124ES
From 03 MAIN (REGULATOR)
SWD 5V RA3
SC OFF
S901
SC ON
IC301
LA7295
R317 8.2
C307 0.022
C308 820P
R318 33K
R320 240
R323 10K
C314 1/50
C312 10/16
R321 270K
R322 10K
C311 1/50
C313 0.012
C315 22/16
R325 8.2K
R324 4.7M
R326 27K
10.34 (0.3)
REC VCC OUT
GND
RIPPLE FILTER OUT
HEAD SW2
ALC FILTER
ALC DET IN
CURRENT PROTECTOR
RIPPLE FILTER
EE MUTE
ALC
PB MUTE
REC MUTE
POWER ON/OFF MUTE
LP SW CONT
REC/EE CONT
RIPPLE FILTER
PB/EE CONT
MUTING CONT
EP SW CONT
EE:L REC:H
HEAD SW1
RIPPLE FILTER
VCC
PB:H EE:L
MUTE :H
NTSC SP:L EP:H
GND
PAL SP:L LP:H
4.9 (0)
8.5
11.2
(5.0)
0.1
3.4
1.3
3.5
R327 1.5K
C316 10/16
C317 47/16
C318 1/50
L301 8.2
R329 100
R328 39K
C319 0.022
R330 4.7K
R331 15K
C321 4.7/50
03 MAIN(AUDIO)

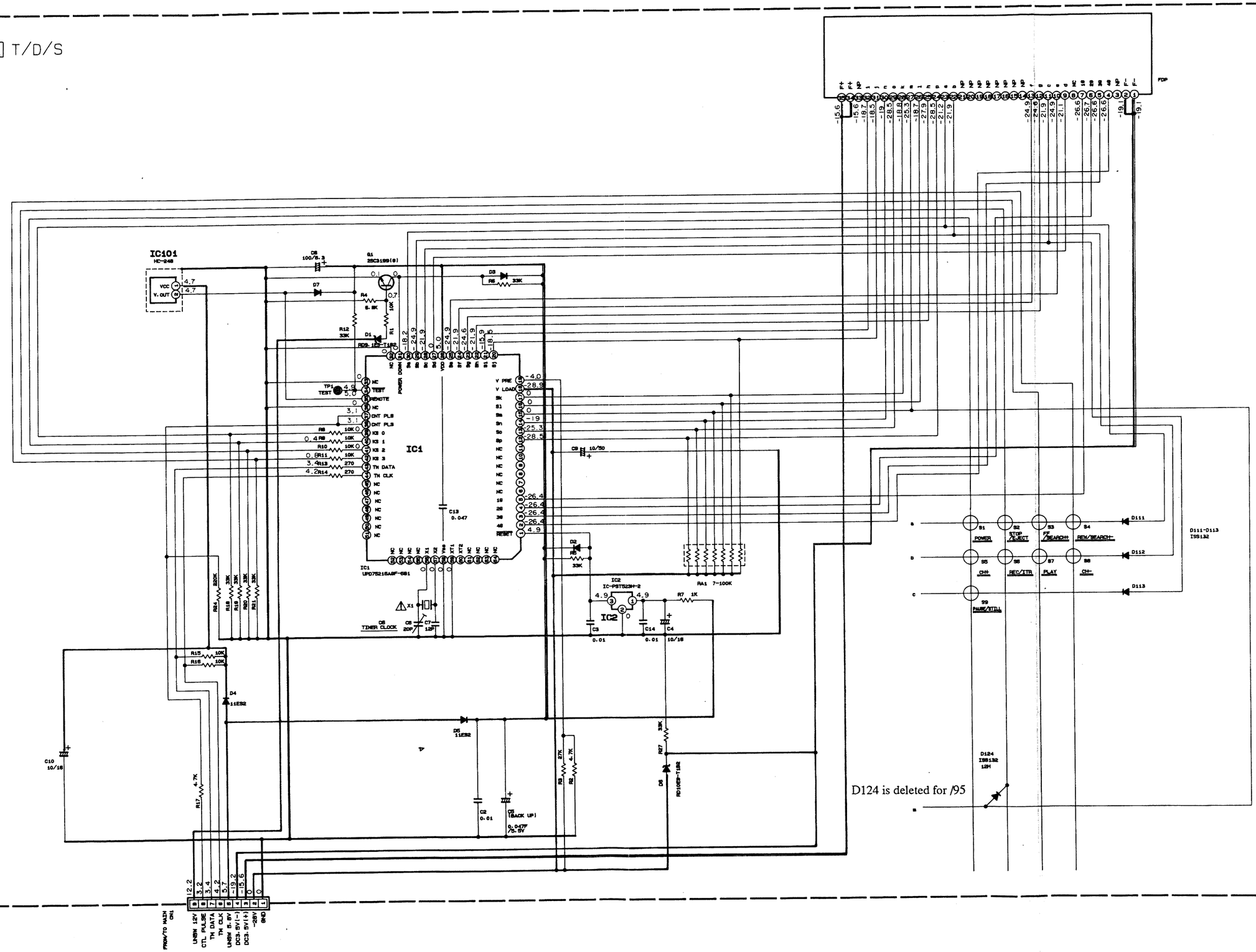

03 MAIN(SERVO)
V PULSE
PB FM/COLOR
DRUM FF
fsc(3.58MHz)
COMP SYNC
From/To 03 MAIN (VIDEO)
IC401
BU2829S
(SERVO CONTROL)
R402 SWITCHING POINT
REC/PB 4.2 Vp-p
REC/PB 5.0 Vp-p
REC/PB 5.9 Vp-p
REC 5.0 Vp-p
REC/PB 3.0 Vp-p
PB 0.35 Vp-p
TP411 DRUM FF
TP401 CTL PULSE
SWD 5V
SWD 12V
2.8 V DC
1.8 V DC
PB 3.0 DC
S DATA
S CLK
C SYNC
FSC
CAP FG
CTL
V FF
DRUM FG
DRUM FG IN
VP OUT
VP MM
PG MM
SAMPLE
PRESET
TRIGGER
REC
PB
RST
CLK
DATA
MODE
BIAS
CAP FG IN
POWER ON RESET
VDDA
GND A
GND
VCC
AMP
S/H
TIMING
OUT
VCO
IC402
LM324N
(OUTPUT MIXER)
IC451
BA7039
(AUTO TRACKING DETECTOR)
From/To 03 MAIN (MECHACON)
From/To 03 MAIN (REGULATOR)
MS10 S DATA
MS11 S CLK
SM3 CAP FG(C/D)
SM2 CTL PULSE
SM5 DRUM FF
MS14 DRUM START
MS9 DRUM CTL V
RS1 SWD 12V
SR1 CTL PULSE
MS1 MOTOR 12V
MS2 GND(M)
MS12 SP
SM4 AVRG FM
MS7 GND
MS6 SERVO
MS5 PAUSE
SM1 CAP DRIVE
MS8 SWD 5V
MS3 CAP FG
MS4 V PULSE
58 DRUM MOTOR
DRUM DRIVE
DRUM FG/PG
GND(M)
MOTOR 12V
CP401 ICP-N15
12 A/CTL HEAD
CTL HEAD(+)
CTL HEAD(-)
CTL
D406 HZS5.1EB2
VR3242/75 SERVO
VR3242/75 SERVO(RED)

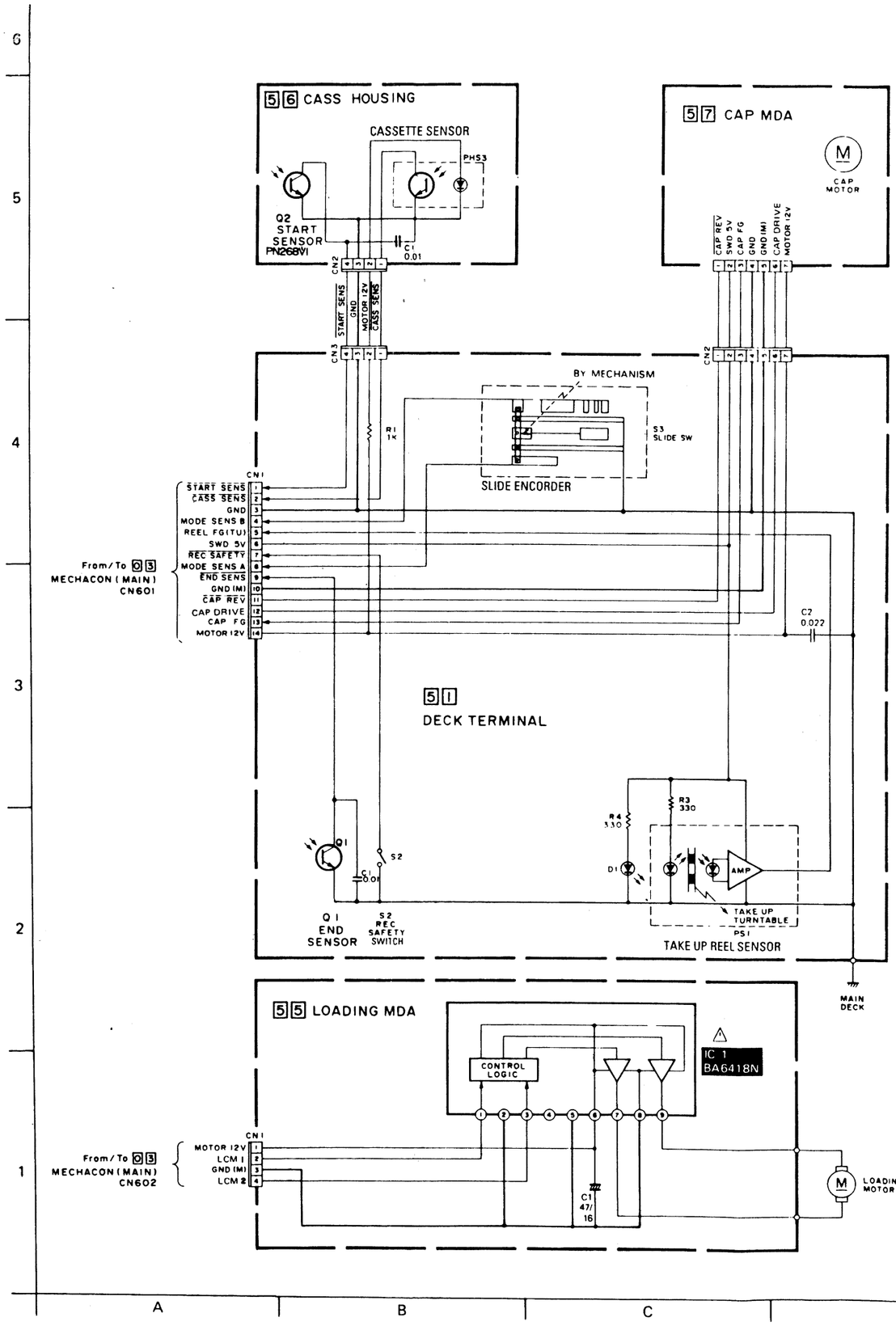

03 MECHACOM (MAIN)
IC602
CAT93C46P
VCC
N.C
ORG
GND
MCE
CLK
DO
DI
IC601
TP601 T.CLK
TP602 T.DATA
TP404 LP
TP605 CAP CTL V
TP603 DRUM STT(H)
CP601 ICP-N25
D601
D602 HZS7.5EB2
D603
D604
D605
D606
Q601 DTC114YS
CF601 4MHz
From 03 MAIN (REGULATOR)
TM. DATA
TM. CLK
From/To 03 MAIN (TUNER/IF)
PWM
S. CURVE
VHF-L
VHF-H
A. MUTE
UHF
AFC DEF
V. MUTE
TU CTL
SYNC PLS
From/To 03 MAIN (VIDEO/AUDIO)
AUX
EE
V.P.ON
AUDIO MUTE
P. MUTE
REC
REC START
REC ST
NC
AUX
SP
From/To 03 MAIN (REGULATOR)
UNSW 5.8V
GND
SWD 5V
POWER ON/OFF
UNSW 12V
MOTOR 12V
GND(M)
LP SPCL
T. DATA
T. CLOCK
Vcc
Vref
LCM1
S. CURV
AVRG FM
LCM2
REV
END S.
CASS
REC SF.
PAUSE
SERVO
CAP DRIVE
DRUM DRIVE
M. SEN A
SYNC IN
D. FF
CTL P.
START S.
VPULSE
H. SEL
PWM
D. STT
TU FG
M. SEN B
CAP FG
CN Vss
RESET
Xin
Xout
AFC DEF
V. MUTE(H)
TNR CTL
V.P.ON
A. MUTE
PHILIPS
P. CTL
OPT. 2
OPT. 1
REC ST
AUX
M. CE
S/M CLK
M. DATA
S. DATA
CN601
START SENS
CASS SENS
GND
MODE SENS B
REEL FG(TU)
SWD 5V
REC SAFETY
MODE SENS A
END SENS
GND(M)
CAP REV
CAP DRIVE
CAP FG
MOTOR 12V
From/To 05 DECK TERMINAL CN1
CN602
MOTOR 12V
LOAD CTL M1
GND(M)
LOAD CTL M2
To 05 LOADING MDA CN1
SM1 CAP DRIVE
SM3 CAP FG
SM4 AVRG FM
MS9 D DRIVE
MS5 PAUSE
MS6 SERVO
SM5 DRUM FF
SM2 CTL PULSE
MS14 DRUM START
MS4 V. PULSE
MS10 S. DATA
MS11 S. CLK
SM3 CAP FG C/D
From/To 03 MAIN (SERVO)
MS8 SWD 5V
MS2 GND(M)
MS1 MOTOR 12V
MS12 SP
MS7 GND
R603 1K
R602 1K
R604 1K
R605 4.7K
R606 4.7K
R607 4.7K
R608 4.7K
R609 1K
R610 4.7K
R611 4.7K
R612 4.7K
R613 4.7K
R615 4.7K
R617 4.7K
R618 4.7K
R619 4.7K
R620 470
R621 4.7K
R616 4.7K
R622 4.7K
R623 1M
R636 680
R635 10K
R634 33K
R633 470
R640 10K
R638 10K
R624 4.7K
R625 10K
R626 47K
R627 150K
R628 33K
R629 10K
R630 10K
R631 10K
R632 56K
C501 0.022
C502 3.3/25
C503 0.047
L601 10μ
C504 1/50
C505 120P
C506 100/6.3
C507 33P
C515 0.033
C516 0.001
C517 100P
C518 100P
C519 100P
VR3442/75
MECHACON

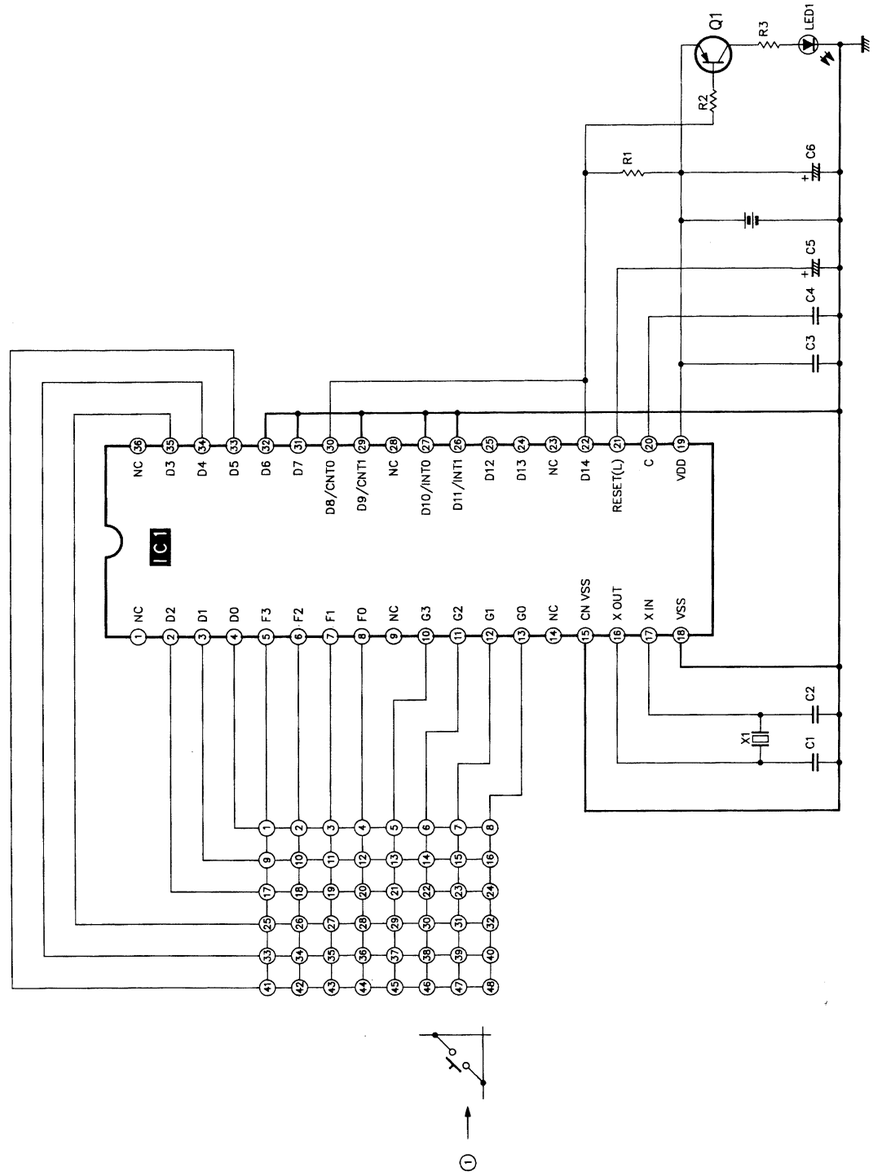

Q501
2SA1309(RS)
(LUMA AMP)
Q502
2SC1740S(RS)
(AMP)
Q504
2SC1740S(RS)
(OUTPUT BUFFER)
43
PRE/REC
PB 0.3 Vp-p
REC 0.2 Vp-p
CN501
GND
PB FM
REC FM/COLOR
PB COLOR
GND
NC
REC FM LEVEL CHECK
NC
DRUM FF
SWD 5V
REC START
From/To
03
MAIN
(VIDEO)
CN201
PB 0.6 Vp-p
REC 60 mVp-p
IC501
LA7375
(HEAD AMP)
Vcc
ENV DET
AGC DET
MUTE SW CTL /D-FF
PB/REC SEL
CUR AMP
PRE GND
D502
CN503
41
U DRUM
CH-1
CH-2
PB 0.6 Vp-p
REC 0.2 Vp-p


3-12
05 VIDEO UNIT
REC/PB
0.5 Vp-p
PB 0.15 Vp-p
REC 0.54 Vp-p
REC 1.0 Vp-p
PB 1.8 Vp-p
REC 1.2 Vp-p
IC1
IC2
DIGITAL TRANSISTOR
REC/PB
4.2Vp-p
PB 1.0 Vp-p
REC 0.65 Vp-p
PB 0.7 Vp-p
PB 60 mVp-p
PB 0.8 Vp-p

21 T/D/S

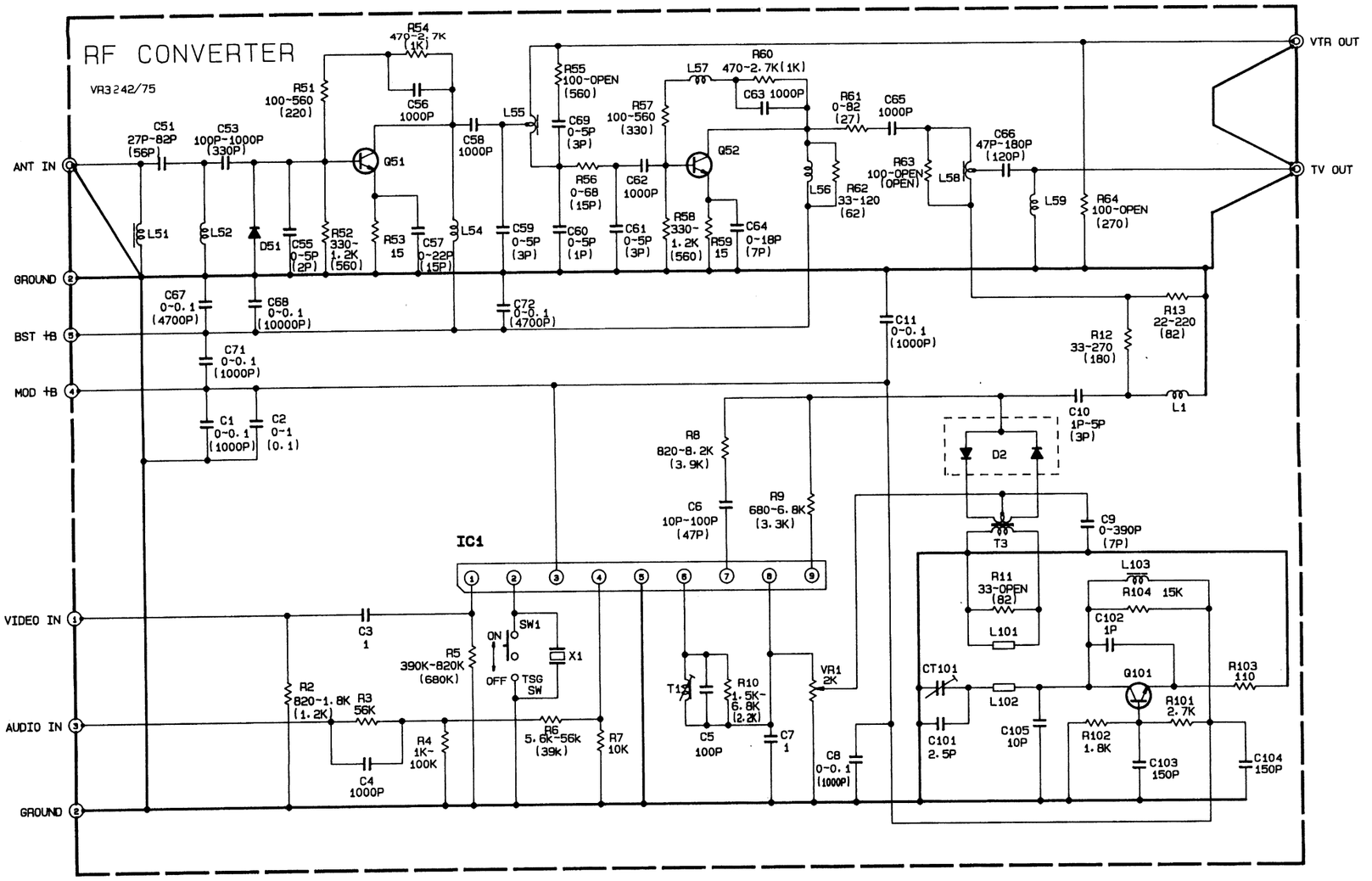

IC101
HC-248
VCC
V. OUT
C8 100/6.3
Q1 2SC3199(G)
D7
R4 8.8K
R12 33K
D1 RD9.1ES-T1B2
D3 RB 33K
TP4 TEST
TEST
REMOTE
CNT PLS
CNT PLS
KS 0
KS 1
KS 2
KS 3
TH DATA
TH CLK
POWER DOWN
V PRE
V LOAD
IC1
IC1 UPD75216AGF-6B1
C13 0.047
RESET
D2 RB 33K
RA1 7-100K
IC2 IC-PST523H-2
IC2
R7 1K
C3 0.01
C14 0.01
C4 10/16
X1
C5 20P
C7 12P
C6 TIMER CLOCK
R24 330K
R18 33K
R19 33K
R20 33K
R21 33K
R15 10K
R16 10K
D4 11ES2
D5 11ES2
C10 10/16
R17 4.7K
R3 47K
R2 4.7K
R37 33K
D6 RD10ES-T1B2
C12 0.01
C8 (BACK UP) 0.047F/5.5V
C9 10/50
FDP
D111 D112 D113
S1 POWER
S2 STOP/EJECT
S3 FF/SEARCH+
S4 REW/SEARCH-
S5 CH+
S6 REC/ITR
S7 PLAY
S8 CH-
S9 PAUSE/STILL
D111-D113 ISS132
D124 ISS132 12M
D124 is deleted for /95
FROM/TO MAIN CKT
UNSW 12V
CTL PULSE
TH DATA
TH CLK
UNSW 5.8V
DC3.8V(-)
DC3.8V(+)
-28V
GND



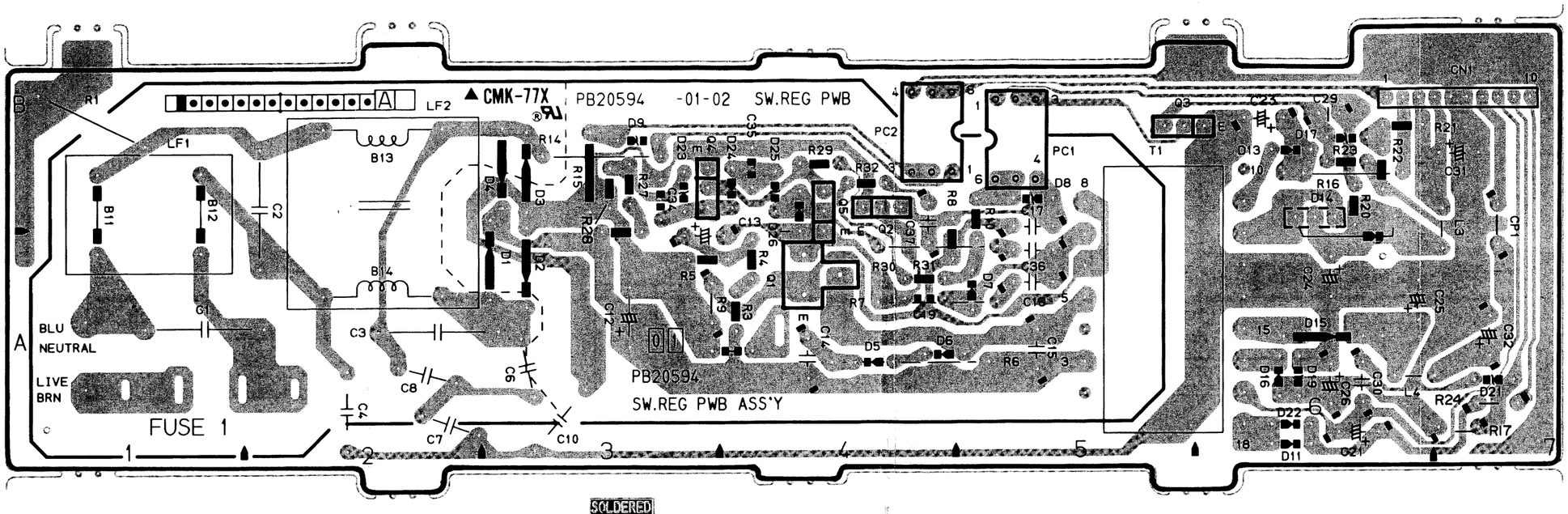


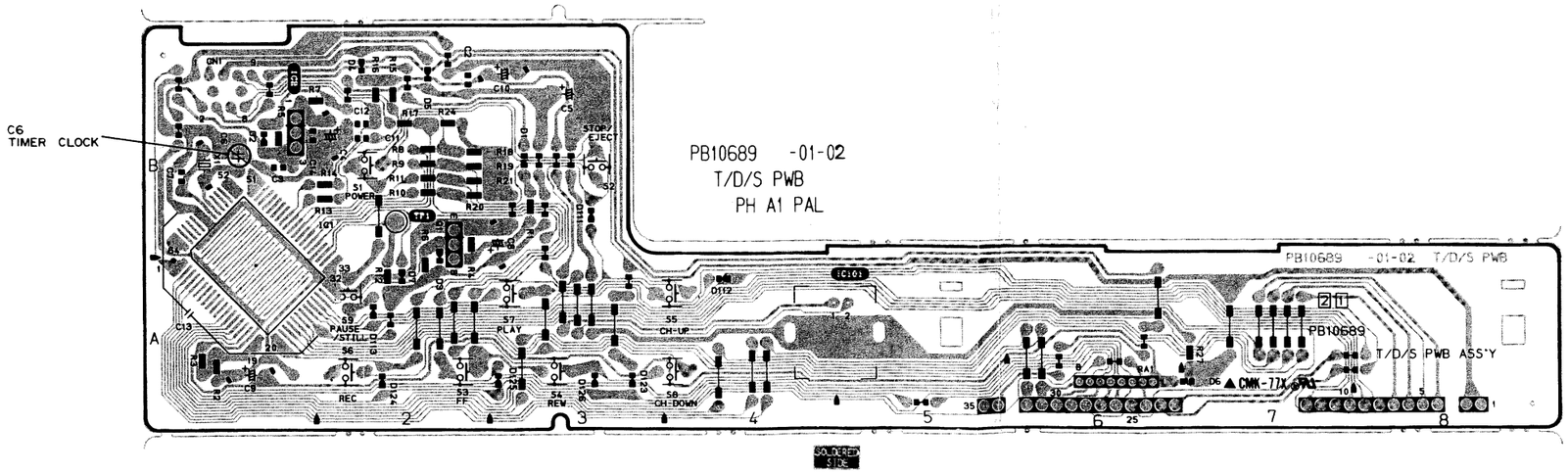
REMOTE CONTROLLER

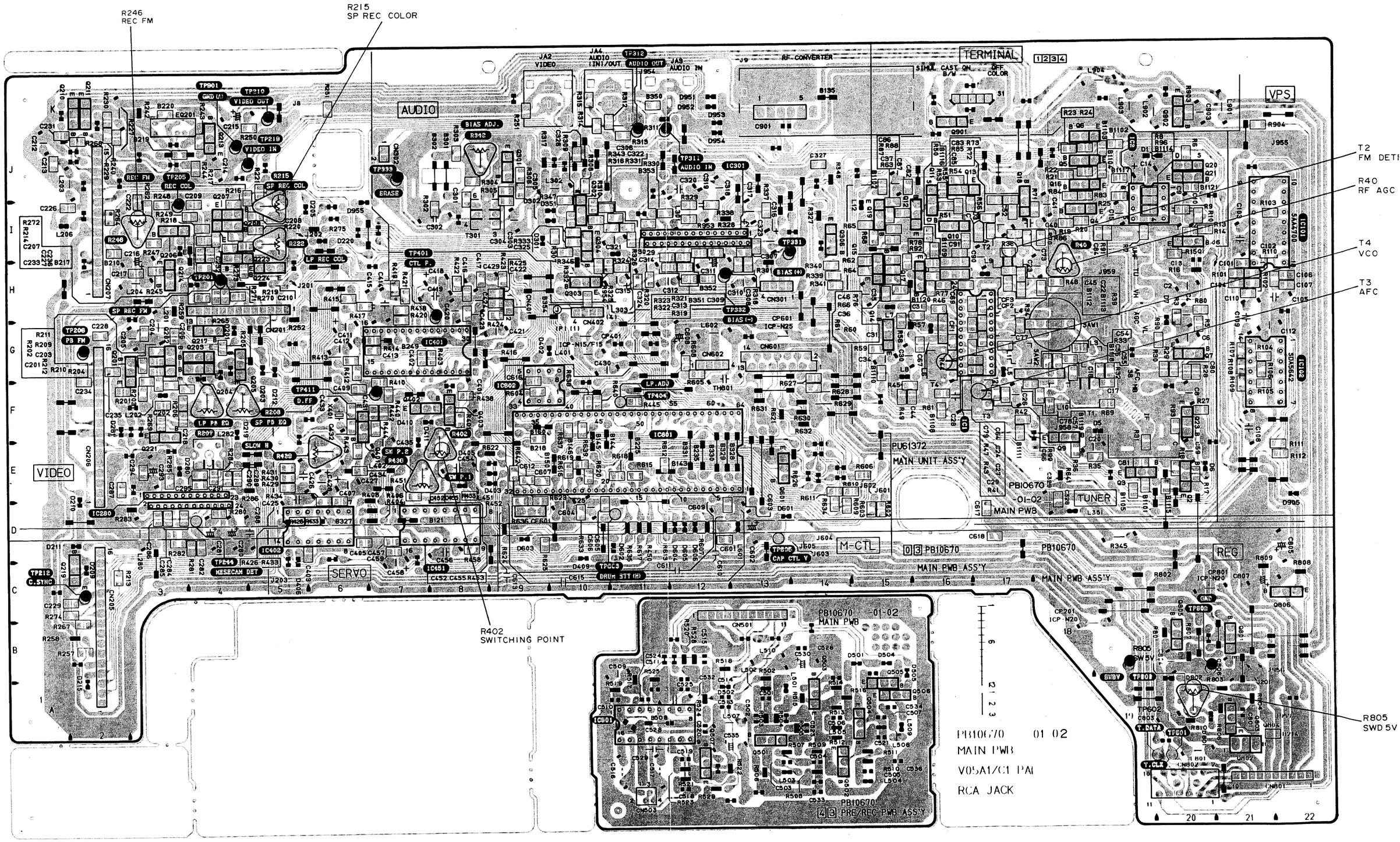
KEY NUMBER	FUNCTION
1	TV POWER
2	NOT USED
3	TV CHANNEL (UP)
4	TV CHANNEL (DOWN)
5	VOLUME (UP)
6	VOLUME (DOWN)
7	NOT USED
8	NOT USED
9	VCR POWER
10	PLAY
11	REW/SEARCH
12	FF/SEARCH
13	STOP
14	FRAME ADVANCE
15	PAUSE/STILL
16	1
17	2
18	3
19	4
20	5
21	6
22	7
23	8
24	9
25	0
26	VCR CH (UP)
27	VCR CH (DOWN)
28	100
29	MENU
30	SLOW
31	NOT USED
32	CLEAR
33	VAR. SLOW (UP)
34	VAR. SLOW (DOWN)
35	REC
36	MEMO
37	SPEED
38	NOT USED
39	TRACKING (UP)
40	NOT USED
41	VCR/TV
42	GO-TO
43	X2 PLAY
44	OTR
45	TRACKING (UP)
46	MUTE
47	SKIP SEARCH
48	STATUS

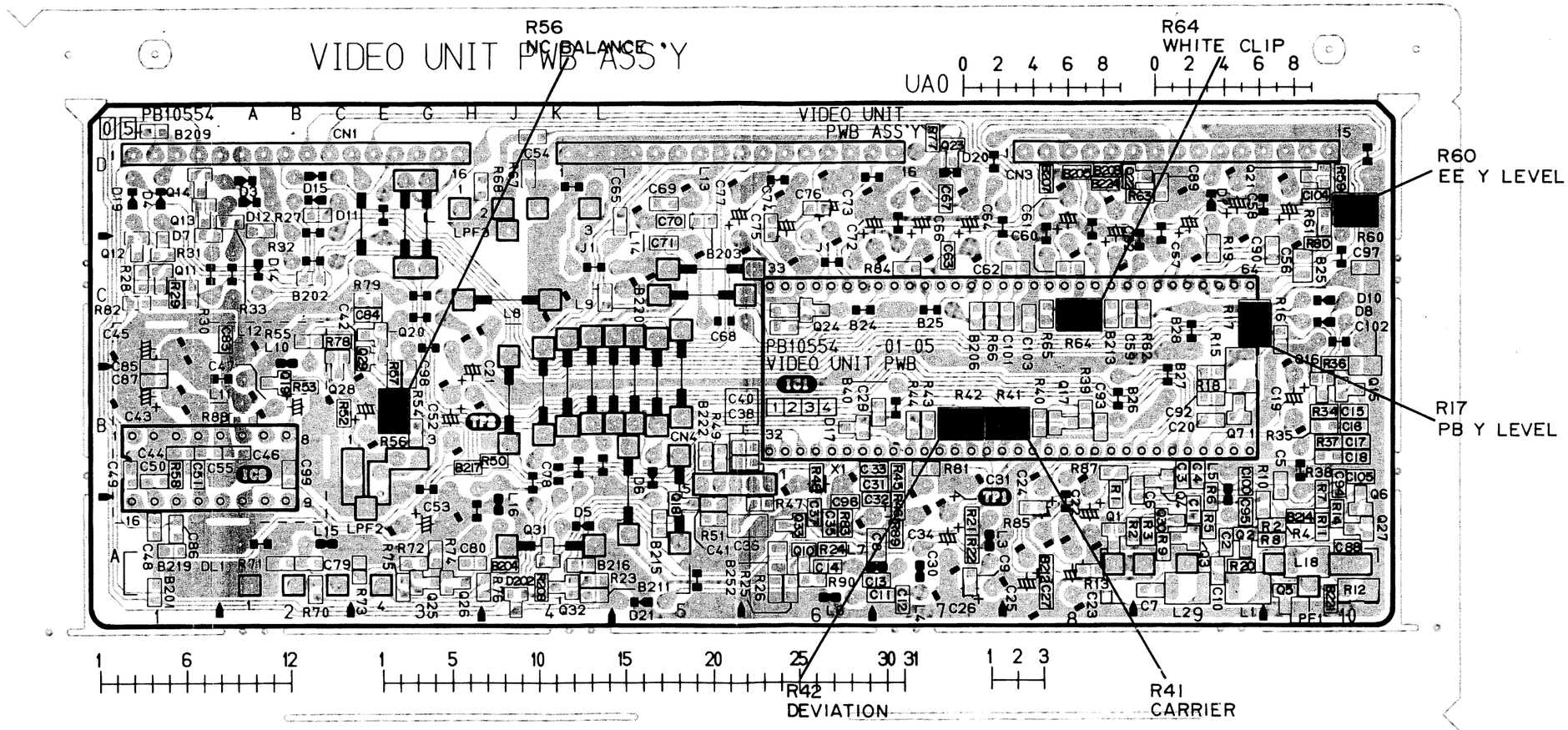


RF CONVERTER
VR3242/95
ANT IN
GROUND
BST +B
MOD +B
VIDEO IN
AUDIO IN
GROUND
VTR OUT
TV OUT
IC1
Q51
Q52
Q101
D2
T1
T2
T3
SW1
SW2
ON
OFF
TSG SW
X1
R51 100~560 (220)
R52 330~1.2K (560)
R53 15
R54 470~2.7K (1K)
R55 100~OPEN (560)
R56 0~68 (15)
R57 100~560 (330)
R58 330~1.2K (560)
R59 15
R60 470~2.7K (1K)
R61 0~82 (27)
R62 33~120 (62)
R63 100~OPEN (OPEN)
R64 100~OPEN (270)
R2 820~1.8K (1.2K)
R3 56K
R4 1K~100K
R5 390K~820K (680K)
R6 5.6K~56K (39K)
R7 10K
R8 820~8.2K (3.9K)
R9 680~6.8K (3.3K)
R10 1.5K~6.8K (2.2K)
R11 33~OPEN (82)
R12 33~270 (180)
R13 22~220 (82)
R101 2.7K
R102 1.8K
R103 110
R104 15K
VR1 2K
C1 0~0.1 (1000P)
C2 0~1 (0.1)
C3 1
C4 1000P
C5 100P
C6 10P~100P (47P)
C7 1
C8 0~0.1 (1000P)
C9 0~390P (7P)
C10 1P~5P (3P)
C11 0~0.1 (1000P)
C51 27P~82P (56P)
C53 100P~1000P (330P)
C55 0~5P (2P)
C56 1000P
C57 0~22P (15P)
C58 1000P
C59 0~5P (3P)
C60 0~5P (1P)
C61 0~5P (3P)
C62 1000P
C63 1000P
C64 0~18P (7P)
C65 1000P
C66 47P~180P (120P)
C67 0~0.1 (4700P)
C68 0~0.1 (10000P)
C69 0~5P (3P)
C71 0~0.1 (1000P)
C72 0~0.1 (4700P)
C101 2.5P
C102 1P
C103 150P
C104 150P
C105 10P
CT101
L51
L52
L53
L54
L55
L56
L57
L58
L59
L101
L102
L103
D51

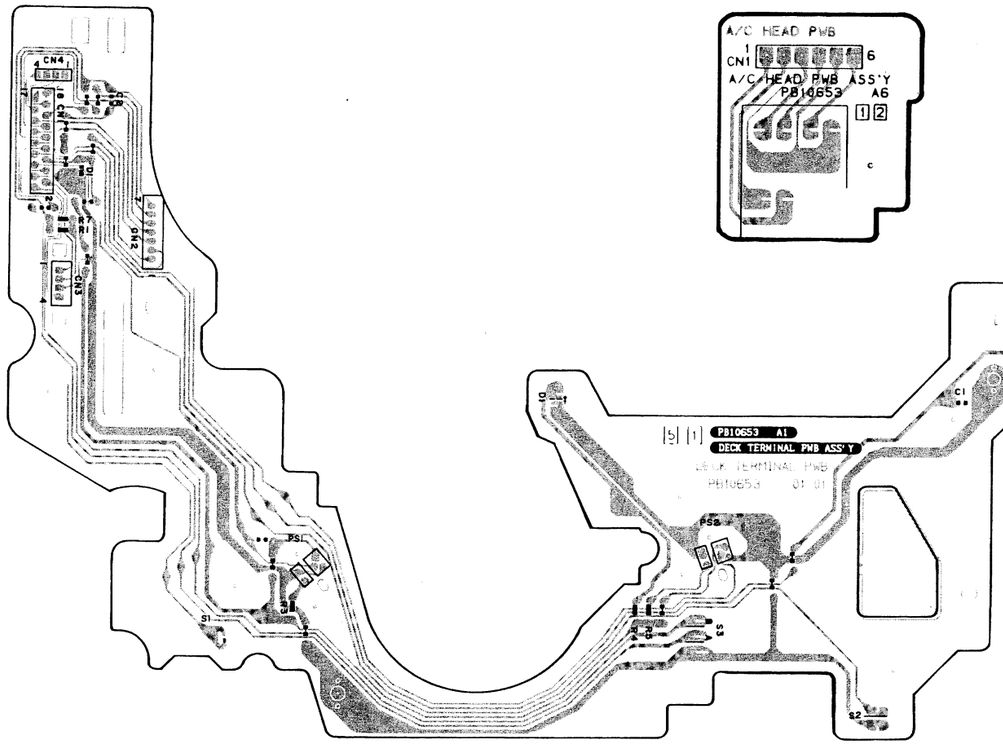

CMK-77X
PB20594 -01-02 SW.REG PWB
PB20594
SW.REG PWB ASS'Y
BLU
NEUTRAL
LIVE
BRN
FUSE 1
SOLDERED SIDE


C6
TIMER CLOCK
PB10689 -01-02
T/D/S PWB
PH A1 PAL
PB10689 -01-02 T/D/S PWB
PB10689
T/D/S PWB ASS'Y
SOLDERED SIDE


R246
REC FM
R215
SP REC COLOR
T2
FM DET
R40
RF AGC
T4
VCO
T3
AFC
R805
SWD 5V
R402
SWITCHING POINT
AUDIO
VIDEO
SERVO
TUNER
REG
TERMINAL
VPS
M-CTL
MAIN PWB ASS'Y
PB10670 01-02
MAIN PWB
PB10670 01 02
MAIN PWB
V05A1/C1 PAL
RCA JACK
PB10670
PRE/REC PWB ASS'Y
PU61372
MAIN UNIT ASS'Y
SOLDERED SIDE

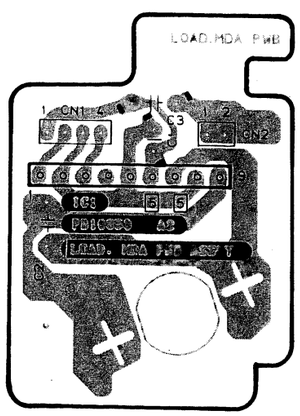

VIDEO UNIT PWB ASS'Y
R56
NC BALANCE
R64
WHITE CLIP
R60
EE Y LEVEL
R17
PB Y LEVEL
R42
DEVIATION
R41
CARRIER
PB10554 A B C E G H J K L
VIDEO UNIT
PWB ASS'Y
PB10554 01-05
VIDEO UNIT PWB
UA0
0 2 4 6 8
0 2 4 6 8
1 6 12
1 5 10 15 20 25 30 31
1 2 3

— DECK TERMINAL —

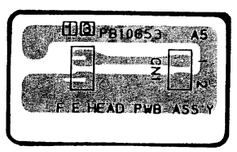


— A/CTL HEAD —

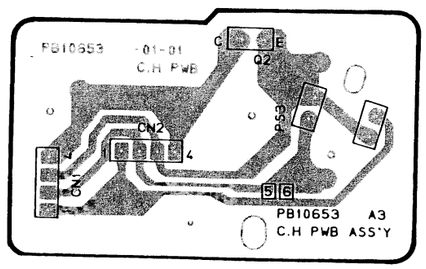
— LOADING MDA —



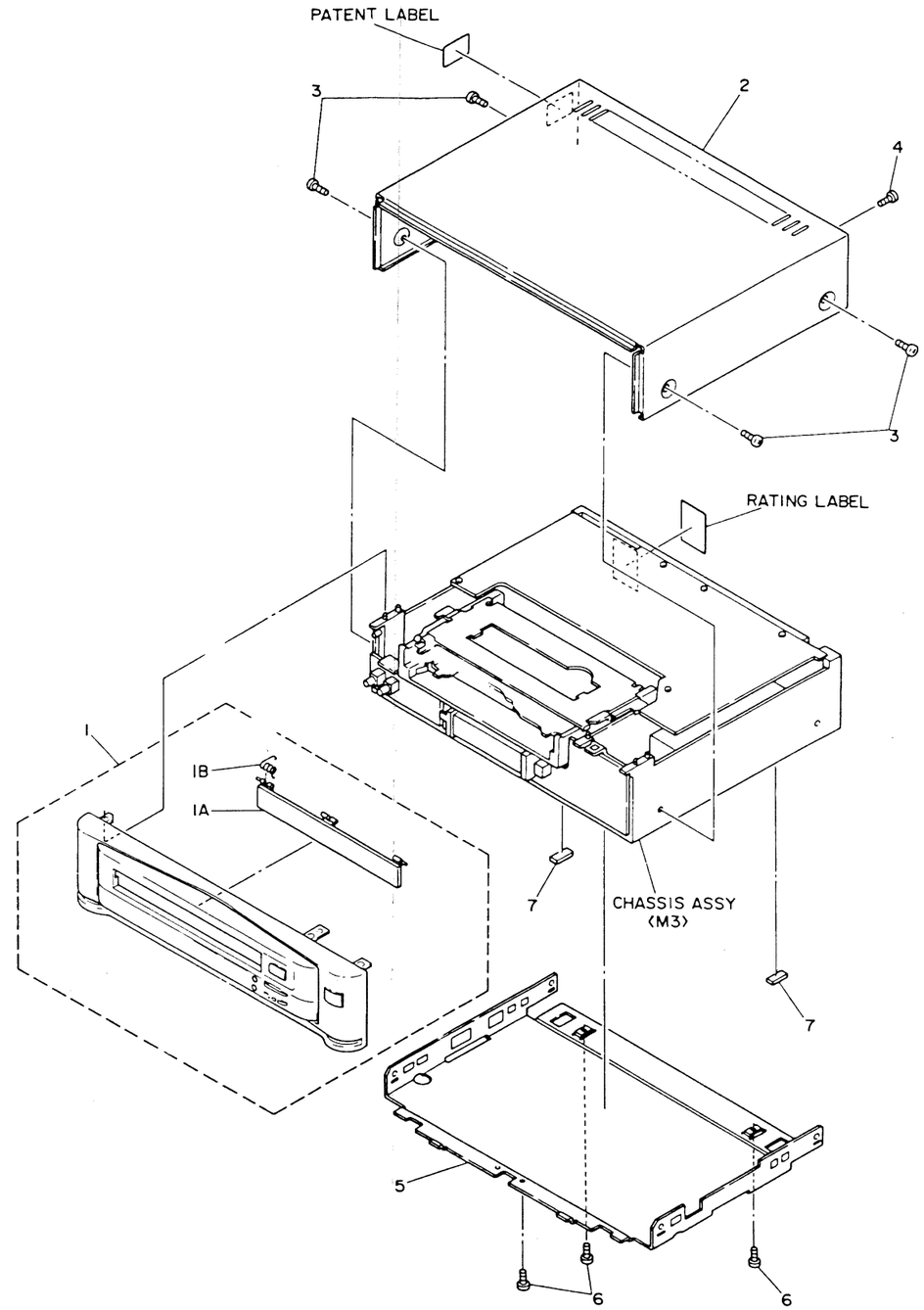
— FULL ERASE HEAD —



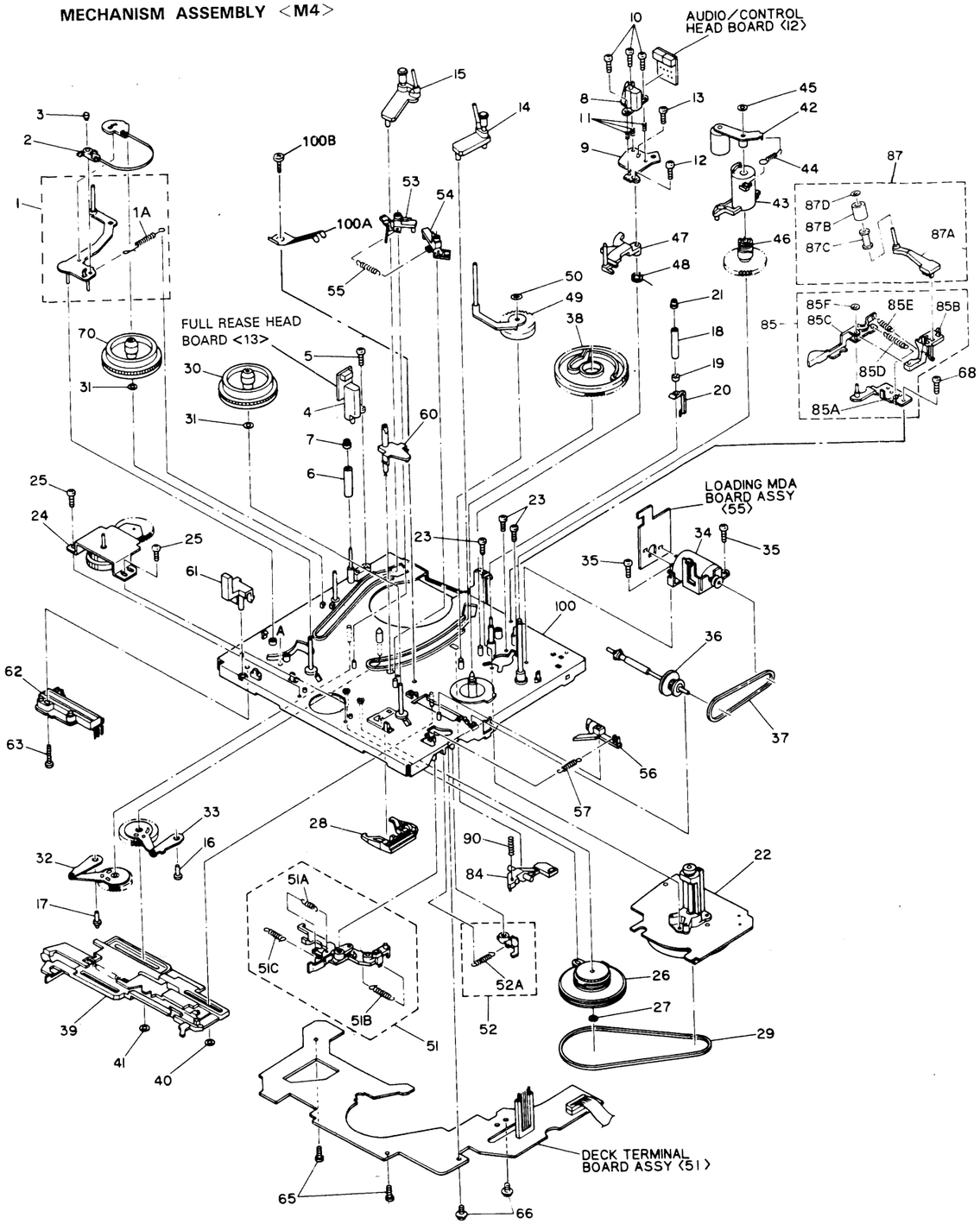
— CASSETTE HOUSING —

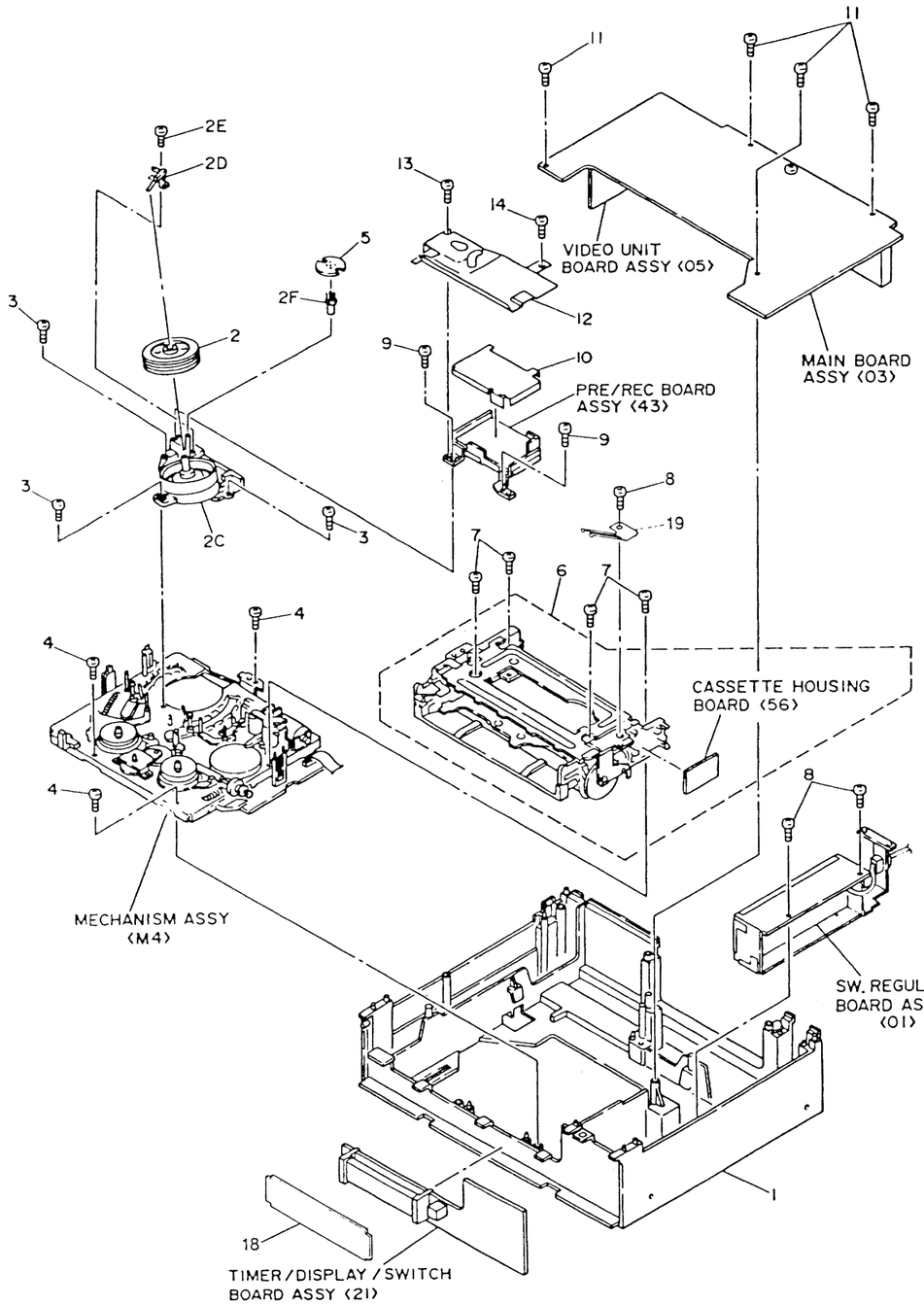


4. CABINET ASSEMBLY < M2 >



MECHANISM ASSEMBLY <M4>




VIDEO UNIT BOARD ASSY (05)
MAIN BOARD ASSY (03)
PRE/REC BOARD ASSY (43)
CASSETTE HOUSING BOARD (56)
MECHANISM ASSY (M4)
SW. REGULATOR BOARD ASSY (01)
TIMER/DISPLAY/SWITCH BOARD ASSY (21)

PARTSLIST FOR VR3442/95

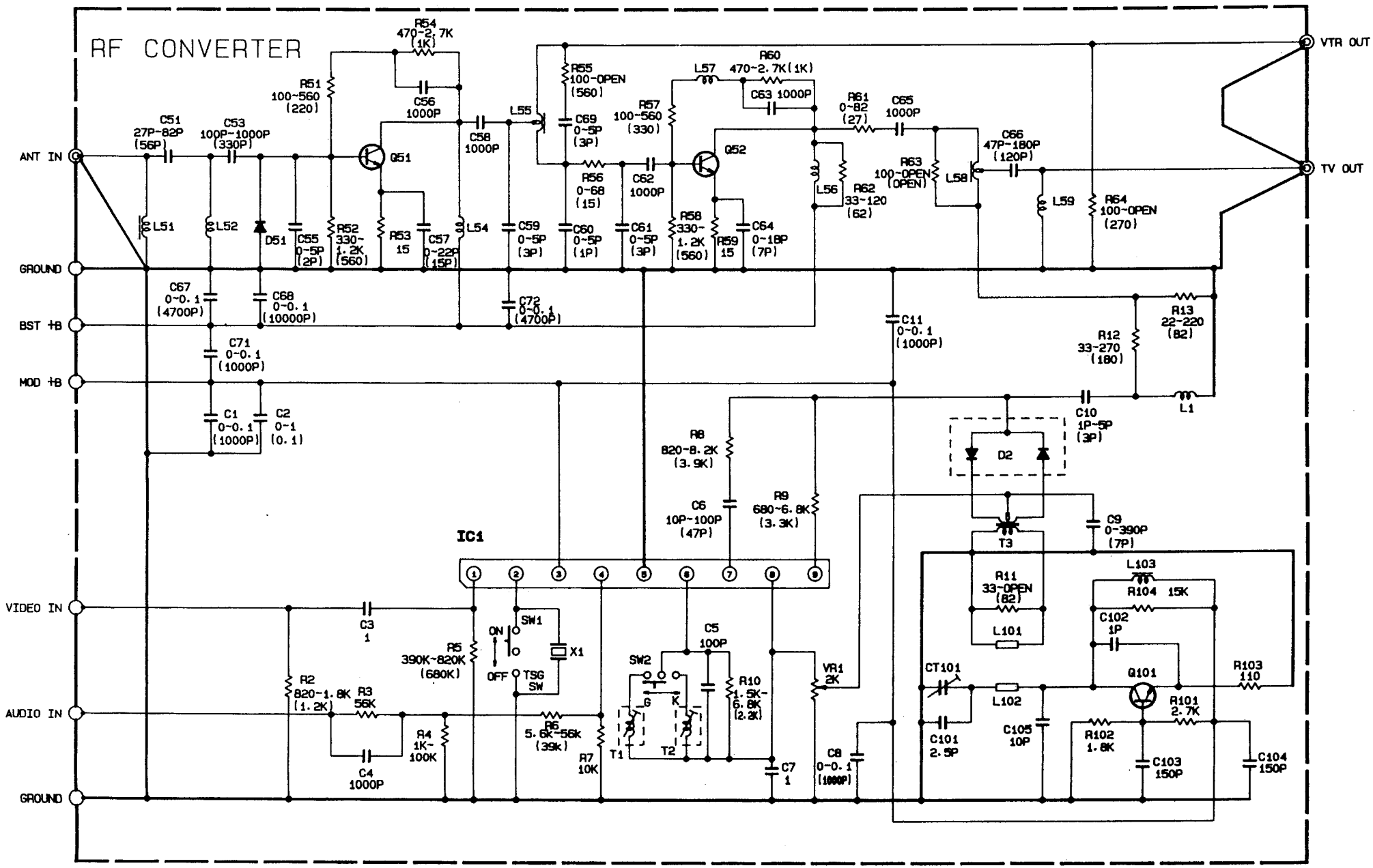
NOTE : $ denotes safety component

MISCELLANEOUS

6	4822 321 23308	RF CABLE
9	4822 736 53245	INST BOOK1
9A	4822 736 53246	INST BOOK2
10	4822 218 30658	REMOTE CONTROLLER

MECHANICAL PARTS

W1	4822 443 41216	FRONT PANEL ASSY
1A	4822 443 63744	CASS HOUSING DOOR
1B	4822 492 42629	TORSION SPRING
2	4822 443 63722	TOP COVER
3	4822 502 13813	SPECIAL SCREW, X4
4	4822 502 13815	SPECIAL SCREW
5	4822 443 63721	BOTTOM COVER
6	4822 502 13817	SCREW, X3, BOTTOM
7	4822 466 40627	FOOT, X2
1	4822 443 63743	BOTTOM CHASSIS
1	4822 464 50957	BOTTOM CHASSIS
2A	4822 691 20802	UPPER DRUM ASSEMBLY
2B	4822 502 13283	DRUM SCREW ASSY, X2
2C	4822 691 20803	LOWER DRUM ASSEMBLY
2D	4822 479 30152	BRUSH ASSEMBLY
2E	4822 502 13821	SCREW
2F	4822 528 90822	ROLLER ASSEMBLY
3	4822 503 21013	SCREW, X3, FOR DRUM
4	4822 502 13814	SPECIAL SCREW,X3
5	4822 528 90827	INERTIA PLATE
6	4822 691 20784	CASS HOUSING ASSY
7	4822 502 13818	SCREW,X4, FOR CASS
18	4822 502 30466	SCREW
8	4822 502 13817	SCREW, X2, REG ASSY
20	4822 502 13817	SCREW,CASS HOUSING
9	4822 503 21007	SCREW, X2, PRE/REC
10	4822 466 82953	SHIELD COVER UPPER
11	4822 502 13817	SCREW, X4, MAIN ASSY
12	4822 466 82954	SHIELD PLATE, DRUM
13	4822 502 13827	SCREW, SHIELD PLATE
14	4822 502 21243	SCREW, SHIELD PLATE
15	4822 466 82962	SHIELD PLATE
16	4822 401 11468	WIRE CLAMP
17	4822 403 70733	BRACKET
21	4822 443 63391	FILTER(FDP)
22	4822 492 71189	EARTH PLATE
1	4822 403 70714	TENSION ARM ASSY
1A	4822 492 33295	TENSION SPRING
2	4822 401 11421	TENSION BAND ASSY
3	4822 535 93247	ADJUST PIN
4	4822 249 40281	FULL ERASE HEAD
5	4822 502 13816	SCREW, FOR F.E.HEAR
6	4822 528 90823	ROLLER
7	4822 462 71778	GUIDE POLE CAP
8	4822 249 10473	AUDIO/CONTROL HEAD
9	4822 464 50858	HEAD BASE
10	4822 502 13812	SPECIAL SCREW, X3
11	4822 492 52267	COMPRESSION SPRING,
12	4822 502 30531	SCREW
13	4822 502 13277	SCREW
14	4822 403 70723	POLE BASE ASSY, TAKE
15	4822 403 70724	POLE BASE ASSY, SUPP
16	4822 462 71867	STOPPER(T)
17	4822 462 71866	STOPPER(S)
18	4822 528 90824	TAPE GUIDE
19	4822 528 90825	GUIDE FLANGE
20	4822 528 90826	TAPE GUARD
21	4822 462 71778	GUIDE POLE CAP
22	4822 361 60503	$ CAPSTAN MOTOR
23	4822 502 12949	SCREW, X3
24	4822 522 33112	IDLER GEAR UNIT
25	4822 502 30471	SCREW, X2
26	4822 528 30413	CLUTCH UNIT
27	4822 532 12105	SLIT WASHER
28	4822 403 70735	CHANGE LEVER ASSEMB
29	4822 358 31143	TIMING BELT
30	4822 528 81451	REEL DISK(TAKE-UP)
31	4822 532 52355	SPACER, X2
32	4822 403 70444	LOADING ARM ASSY, SU
33	4822 403 70445	LOADING ARM ASSY, TA
34	4822 361 21462	MODE MOTOR ASSY
35	4822 502 30471	SCREW, X2
36	4822 528 30409	WORM CLUTCH ASSY
37	4822 358 31142	LOADING BELT
38	4822 522 33108	CONTROL CAM
39	4822 403 70446	PLATE ASSY
40	4822 532 12103	SLIT WASHER
41	4822 532 12105	SLIT WASHER
42	4822 403 70447	PINCH ROLLER ARM AS
43	4822 403 70441	PINCH ROLLER PRESS
44	4822 492 33287	TENSION SPRING
45	4822 532 12103	SLIT WASHER
46	4822 522 33109	PINCH ROLLER CAM
47	4822 403 70448	GUIDE ARM ASSY
48	4822 492 42564	TORSION SPRING
49	4822 522 33111	HALF LOADING GEAR A
50	4822 532 12104	SLIT WASHER
51	4822 403 70449	CANCEL LEVER ASSY
51A	4822 492 33293	TENSION SPRING
51B	4822 492 33289	TENSION SPRING
51C	4822 492 33294	TENSION SPRING
52	4822 403 70451	HOOK ASSY
52A	4822 492 33291	TENSION SPRING
53	4822 403 70452	MAIN BRAKE ASSY(SUP
54	4822 403 70453	MAIN BRAKE ASSY(TAK
55	4822 492 33292	TENSION SPRING
56	4822 403 70736	SUB BRAKE ASSY (TAK
57	4822 492 33288	TENSION SPRING
60	4822 255 41225	LED HOLDER, INCL.LED
61	4822 276 13134	REC SAFETY SWITCH
62	4822 277 21637	SLIDE ENCORDER, S3
63	4822 502 13816	SCREW
65	4822 502 13819	SCREW, X2
66	4822 502 13809	SCREW, X2
68	4822 502 30471	SCREW, FOR ARM BASE
70	4822 528 81452	REEL DISK(SUPPLY)
84	4822 403 70715	CAPSTAN BRAKE ASSY
85	4822 403 70719	ARM BASE ASSY
85A	4822 403 70721	ARM BASE SUB ASSY
85B	4822 403 70713	CLEANER ARM
85C	4822 403 70718	CANCEL LEVER
85D	4822 492 33355	TENSION SPRING
85E	4822 492 33356	TENSION SPRING
85F	4822 532 12193	SLIT WASHER


RF CONVERTER
ANT IN
GROUND
BST +B
MOD +B
VIDEO IN
AUDIO IN
GROUND
VTR OUT
TV OUT
IC1
Q51
Q52
Q101
D51
D2
T1
T2
T3
SW1
SW2
ON
OFF
TSG SW
X1
L51
L52
L54
L55
L56
L57
L58
L59
L1
L101
L102
L103
R51 100~560 (220)
R52 330~1.2K (560)
R53 15
R54 470~2.7K (1K)
R55 100~OPEN (560)
R56 0~68 (15)
R57 100~560 (330)
R58 330~1.2K (560)
R59 15
R60 470~2.7K(1K)
R61 0~82 (27)
R62 33~120 (62)
R63 100~OPEN (OPEN)
R64 100~OPEN (270)
R2 820~1.8K (1.2K)
R3 56K
R4 1K~100K
R5 390K~820K (680K)
R6 5.6K~56K (39K)
R7 10K
R8 820~8.2K (3.9K)
R9 680~6.8K (3.3K)
R10 1.5K~6.8K (2.2K)
R11 33~OPEN (82)
R12 33~270 (180)
R13 22~220 (82)
R101 2.7K
R102 1.8K
R103 110
R104 15K
VR1 2K
C1 0~0.1 (1000P)
C2 0~1 (0.1)
C3 1
C4 1000P
C5 100P
C6 10P~100P (47P)
C7 1
C8 0~0.1 (1000P)
C9 0~390P (7P)
C10 1P~5P (3P)
C11 0~0.1 (1000P)
C51 27P~82P (56P)
C53 100P~1000P (330P)
C55 0~5P (2P)
C56 1000P
C57 0~22P (15P)
C58 1000P
C59 0~5P (3P)
C60 0~5P (1P)
C61 0~5P (3P)
C62 1000P
C63 1000P
C64 0~18P (7P)
C65 1000P
C66 47P~180P (120P)
C67 0~0.1 (4700P)
C68 0~0.1 (10000P)
C69 0~5P (3P)
C71 0~0.1 (1000P)
C72 0~0.1 (4700P)
CT101
C101 2.5P
C102 1P
C103 150P
C104 150P
C105 10P

PARTSLIST FOR VR3242/57/75/95

NOTE: $ denotes Safety Component

MISCELLANEOUS

1	4822 218 30671	REMOTE CONTROLLER
9	4822 736 53244	INSTRUCTIONS (/57)
9	4822 736 53243	INSTRUCTIONS (/75)

CHASSIS ASSEMBLY

1	4822 443 41215	FRONT PANEL ASSY /95
1	4822 443 41214	FRONT PANEL ASSY /57
1	4822 443 41213	FRONT PANEL ASSY /75
2	4822 443 63722	TOP COVER
3	4822 502 13813	SPEC. SCR TOP COVER
4	4822 502 13815	SPEC. SCR, TOP COVER
5	4822 443 63787	BOTTOM COVER (/95)
5	4822 443 63721	BOTTOM COVER (/57/75)
6	4822 502 13817	SCR, X3, BOTT. COVER
7	4822 466 40627	FOOT, X2

MECHANISM ASSEMBLY

1	4822 464 50957	BOTTOM CHASSIS
2	4822 691 20689	DRUM ASSY
2C	4822 691 20821	DRUM BASE ASSY (/95)
2C	4822 691 20688	DRUM BASE ASSY (/57/75)
2D	4822 290 81443	BRUSH ASSY
2E	4822 503 21007	SCR, BRUSH
2F	4822 528 90822	ROLLER ASSY
2G	4822 502 13277	SCR, X3 DRUM ASSY
2H	4822 503 21007	SCR, SHIELD
3	4822 503 21013	SCR, X3 DRUM ASSY
4	4822 502 13814	SPEC. SCR, MECHANISM
5	4822 528 90827	INERTIA PLATE
6	4822 691 20822	CASS. HOUSING ASSY
7	4822 502 13818	SCR,X4 CASS. HOUSING
8	4822 502 13817	SCR, X2 REG ASSY
9	4822 503 21007	SCR, X2 PRE/REC
10	4822 466 82953	SHIELD(UPPER),PRE/RE
11	4822 502 13817	SCR, X4 MAIN BOARD
12	4822 466 82954	SHIELD PLATE, DRUM
13	4822 502 13827	SCR, SHIELD (DRUM)
14	4822 502 21243	SCREW
15	4822 466 82962	SHIELD PLATE
16	4822 401 11468	WIRE CLAMP
17	4822 403 70733	BRACKET
18	4822 502 30466	SCR
19	4822 443 63391	FILTER(FDP)

1	4822 403 70714	TENSION ARM ASSY
1A	4822 492 33295	TENSION SPRING
2	4822 401 11421	TENSION BAND ASSY
3	4822 535 93247	ADJUST PIN
4	4822 249 40281	FULL ERASE HEAD
5	4822 502 13816	SCR, F.E.HEAR
6	4822 528 90823	ROLLER
7	4822 462 71778	GUIDE POLE CAP
8	4822 249 10473	AUDIO/CONTROL HEAD
9	4822 464 50858	HEAD BASE
10	4822 502 13812	SPEC. SCR,X3
11	4822 492 52267	COMPRESS. SPRING,X3
12	4822 502 30531	SCR
13	4822 502 13277	SCR
14	4822 403 70723	POLE BASE (TAKE-UP)
15	4822 403 70724	POLE BASE (SUPPLY)
16	4822 462 71867	STOPPER(T)
17	4822 462 71866	STOPPER(S)
18	4822 528 90824	TAPE GUIDE
19	4822 528 90825	GUIDE FLANGE
20	4822 528 90826	TAPE GUARD

21	4822 462 71778	GUIDE POLE CAP
22	4822 361 60503	CAPSTAN MOTOR
23	4822 502 12949	SCR,X3
24	4822 522 33112	IDLER GEAR UNIT
25	4822 502 30471	SCR,X2
26	4822 528 30413	CLUTCH UNIT
27	4822 532 12105	SLIT WASHER
28	4822 403 70735	CHANGE LEVER ASSY
29	4822 358 31143	TIMING BELT
30	4822 528 81451	REEL DISK(TAKE-UP)
31	4822 532 52355	SPACER,X2
32	4822 403 70444	LOADING ARM (SUPPLY)
33	4822 403 70445	LOADING ARM TAKE-UP)
34	4822 361 21462	MODE MOTOR ASSY
35	4822 502 30471	SCR,X2
36	4822 528 30409	WORM CLUTCH ASSY
37	4822 358 31142	LOADING BELT
38	4822 522 33108	CONTROL CAM
39	4822 403 70446	PLATE ASSY
40	4822 532 12103	SLIT WASHER

41	4822 532 12105	SLIT WASHER
42	4822 403 70447	PINCH ROLLER ARM ASS
43	4822 403 70441	PINCH ROLLER LEVER
44	4822 492 33287	TENSION SPRING
45	4822 532 12103	SLIT WASHER
46	4822 522 33109	PINCH ROLLER CAM
47	4822 403 70448	GUIDE ARM ASSY
48	4822 492 42564	TORSION SPRING
49	4822 522 33111	HALF LOADING GEAR AS
50	4822 532 12104	SLIT WASHER
51	4822 403 70449	CANCEL LEVER ASSY
51A	4822 492 33293	TENSION SPRING
51B	4822 492 33289	TENSION SPRING
51C	4822 492 33294	TENSION SPRING
52	4822 403 70451	HOOK ASSY
52A	4822 492 33291	TENSION SPRING
53	4822 403 70452	MAIN BRAKE (SUPPLY)
54	4822 403 70453	MAIN BRAKE (TAKE-UP)
55	4822 492 33292	TENSION SPRING
56	4822 403 70736	SUB BRAKE (TAKE-UP)
57	4822 492 33288	TENSION SPRING
60	4822 255 41225	LED HOLDER,+ LED.D1
61	4822 276 13134	REC SAFETY SWITCH,S2
62	4822 277 21637	SLIDE ENCODER,S3
63	4822 502 13816	SCR
65	4822 502 13819	SCR,X2
66	4822 502 13809	SCR,X2
68	4822 502 30471	SCR, ARM BASE ASSY
70	4822 528 81452	REEL DISK(SUPPLY)

84	4822 403 70715	CAPSTAN BRAKE ASSY
85	4822 403 70719	ARM BASE ASSY
85A	4822 403 70721	ARM BASE SUB ASSY
85B	4822 403 70713	CLEANER ARM
85C	4822 403 70718	CANCEL LEVER
85D	4822 492 33355	TENSION SPRING
85E	4822 492 33356	TENSION SPRING
85F	4822 532 12193	SLIT WASHER
87	4822 403 70737	CLEANER BASE ASSY
87A	4822 403 70716	CLEANER BASE
87B	4822 528 90858	CLEANER
87C	4822 528 90859	ROLLER
87D	4822 532 12192	SLIT WASHER
90	4822 492 52334	COMPRESSION SPRING
100	4822 691 20783	MAIN DECK ASSY
100A	4822 492 70943	EARTH PLATE
100B	4822 502 13828	SCR

POWER SUPPLY PCB ASSEMBLY

PWBA	4822 214 33886	SW REG.BD ASSY (/95)
PWBA	4822 214 33805	SW REG BD ASSY (/57)
PWBA	4822 214 33841	SW REG BD ASSY (/75)

Q1	4822 130 62795	TRANSISTOR
Q2	4822 130 62794	TRANSISTOR
Q3	4822 130 42483	TRANSISTOR
Q4	4822 130 42483	TRANSISTOR (/57)
Q5	4822 130 43191	TRANSISTOR (/57)
D1	4822 130 82698	DIODE
D2	4822 130 82698	DIODE
D3	4822 130 82698	DIODE
D4	4822 130 82698	DIODE
D5	4822 130 83208	FR DIODE
D6	4822 130 83208	FR DIODE
D7	$ 4822 130 32778	DIODE
D8	4822 130 83155	DIODE
D11	$ 4822 130 32778	DIODE
D13	4822 130 82768	FR DIODE
D14	4822 130 82696	FR DIODE
D15	4822 130 81377	DIODE (/95)
D15	4822 130 83194	SB DIODE (/57/75)
D16	4822 130 82768	FR DIODE
D17	4822 130 83156	ZENER DIODE
D19	4822 130 82692	ZENER DIODE
D21	4822 130 82693	ZENER DIODE
D22	$ 4822 130 32778	DIODE
D23	4822 130 83192	ZENER DIODE (/57)
D24	$ 4822 130 32778	DIODE (/57)
D25	4822 130 83193	ZENER DIODE (/57)
D26	4822 130 82768	FR DIODE (/57)

R3	4822 111 50565	RESISTOR
R4	4822 111 50565	RESISTOR
R5	4822 111 30976	RESISTOR
R6	4822 117 10009	OMF RESISTOR
R7	4822 117 10008	OMF RESISTOR
R8	4822 116 81729	RESISTOR
R9	4822 117 10052	MF RESISTOR
R10	4822 050 11202	RESISTOR
R11	4822 111 20405	RESISTOR (/95)
R16	4822 117 10007	OMF RESISTOR
R17	$ 4822 116 83202	FUSIBLE RESISTOR
R20	4822 116 81729	RESISTOR (/95/75)
R20	4822 050 11202	RESISTOR (/57)
R21	4822 050 23741	CMF RESISTOR
R22	4822 050 24871	CMF RESISTOR
R23	4822 050 11202	RESISTOR
R24	4822 117 10011	MF RESISTOR
B12	4822 532 12235	BUS WIRE (/95)
R26	4822 111 30975	RESISTOR (/57)
R27	4822 111 30975	RESISTOR (/57)
R28	4822 116 81637	RESISTOR (/57)
R29	4822 116 81729	RESISTOR (/57)
R30	4822 117 10048	OMF RESISTOR (/57)
R31	4822 116 81729	RESISTOR (/57)
R32	4822 111 30974	RESISTOR (/57)

C2	$ 4822 121 43979	MM CAPACITOR (/57/95)
C2	4822 121 70234	M CAPACITOR (/75)
C3	$ 4822 121 43979	MM CAPACITOR (/57/95)
C3	4822 121 70234	M CAPACITOR (/75)
C4	4822 126 12434	CAPACITOR
C6	4822 126 12553	CAPACITOR
C7	4822 126 12432	CAPACITOR (/57/95)
C7	4822 126 12553	CAPACITOR (/75)
C8	4822 126 12432	CAPACITOR
C10	4822 126 12433	CAPACITOR
C11	4822 126 12552	C.CAPACITOR (/95)
C12	4822 124 23819	E CAPACITOR (/95/75)
C12	4822 124 80343	E CAPACITOR (/57)
C13	4822 124 23852	E CAPACITOR
C14	4822 124 11223	CAPACITOR
C15	4822 126 11615	CAPACITOR
C16	4822 121 43972	MM CAPACITOR
C17	4822 121 43958	M CAPACITOR (/95/75)
C17	4822 121 70193	M CAPACITOR (/57)

C21	4822 124 80384	E CAPACITOR (/95/75)
C21	4822 124 80302	E CAPACITOR (/57)
C23	4822 124 23856	E CAPACITOR
C24	4822 124 80441	E CAPACITOR (/57/95)
C24	4822 124 23834	E CAPACITOR (/75)
C25	4822 124 80442	E CAPACITOR (/57/95)
C25	4822 124 23872	E CAPACITOR (/75)
C26	4822 124 23853	E CAPACITOR
C29	4822 121 20242	E CAPACITOR (/57/95)
C29	4822 124 23854	E CAPACITOR (/75)
C30	4822 121 43958	M CAPACITOR
C31	4822 124 23098	E CAPACITOR (/57/95)
C31	4822 124 80301	E CAPACITOR (/75)
C32	4822 124 23844	E CAPACITOR (/57/95)
C32	4822 124 80299	E CAPACITOR (/75)
C34	4822 126 11599	CAPACITOR (/57)
C35	4822 126 10425	CAPACITOR (/57)
C36	4822 126 10081	TF CAPACITOR (/57)
C37	4822 126 12368	CAPACITOR (/57)

L3	4822 157 70119	COIL
L4	4822 157 70119	COIL
PC1	$ 4822 130 82535	PH COUPLER
POC1	4822 321 10946	POWER CORD (M) (/95)
POC1	4822 321 10898	POWER CORD (/57)
POC1	4822 321 10912	POWER CORD (/75)
T1	$ 4822 148 81186	SW TRANS (/95/75)
T1	$ 4822 148 81274	SW TRANS (/57)
CL1	4822 265 30707	FUSE CLIP,X2
ETH1	4822 492 71207	E.PLATE(R/B)
HD1	4822 401 11312	STRAIN RELIEF
HS1	4822 255 41286	HEAT SINK (/95)
HS1	4822 255 41272	HEAT SINK (/57/75)
LF2	$ 4822 121 20261	LINE FILTER
SCW1	4822 502 21251	SCR, EARTH PLATE
SCW2	4822 502 30597	SCR, HEAT SINK
SLD1	4822 466 93189	S.CASE(S/R)
SLD2	4822 466 93192	S.COVER(S/R)
CN1	4822 265 41259	CONNECTOR
CP1	$ 4822 209 63611	CIRCUIT PROTECTOR
F1	$ 4822 253 30407	FUSE,

MAIN BOARD ASSEMBLY

PWBA	4822 214 33885	MAIN BOARD ASSY (/95)
PWBA	4822 214 33883	MAIN BOARD ASSY (/57)
PWBA	4822 214 33882	MAIN BOARD ASSY (/75)
RF1	4822 214 33887	RF CONVERTER (/95)
RF1	4822 214 33806	RF CONVERTER, (/57)
RF1	4822 214 33843	RF CONVERTER (/75)
TB1	4822 290 81572	TERM BD ASSY (/95)
TB1	4822 214 33807	TERM BD ASSY (/57)
TB1	4822 290 81543	TERM BD ASSY (/75)
SPC2	4822 466 62314	SHEET(TERMINAL) (/95)
CL1	4822 401 11468	WIRE CLAMP,X2
ETH1	4822 403 70459	EARTH PLATE, TERM.
JA2	4822 264 30321	PIN JACK, V IN/OUT
JA4	4822 264 30319	PIN JACK, A IN/OUT
SCW1	4822 502 13827	SCREW, RF (/95/75)
SCW1	4822 502 12042	SCREW, RF (/57)
SCW2	4822 502 13817	SCR, TERMINAL BOARD
IC1	4822 209 31726	IC
IC2	4822 209 30246	IC
Q1	4822 130 42483	TRANSISTOR
Q2	4822 130 62589	TRANSISTOR
Q3	4822 130 60588	TRANSISTOR
Q4	4822 130 60161	TRANSISTOR
Q5	4822 130 60161	TRANSISTOR
Q6	4822 130 60161	TRANSISTOR
Q7	4822 130 61187	TRANSISTOR
Q9	4822 130 41651	TRANSISTOR
Q10	4822 130 42594	TRANSISTOR
Q11	4822 130 62796	FE TRANSISTOR
Q12	4822 130 42594	TRANSISTOR
Q13	4822 130 42483	TRANSISTOR
Q15	4822 130 42483	TRANSISTOR
Q17	4822 130 60161	TRANSISTOR (/95)
Q18	4822 130 61544	TRANSISTOR
Q19	4822 130 60161	TRANSISTOR
Q23	4822 130 62793	TRANSISTOR
D1	4822 209 83931	ZENER DIODE
D3	4822 130 82772	V.DIODE (/95)
D5	4822 130 82689	ZENER DIODE
R3	4822 116 83193	RESISTOR
R5	4822 116 83183	RESISTOR
R7	4822 116 83145	RESISTOR
R8	4822 116 83164	RESISTOR
R9	4822 116 83157	RESISTOR
R10	4822 116 83157	RESISTOR
R13	4822 116 83167	RESISTOR
R14	4822 116 83176	RESISTOR
R15	4822 116 83146	RESISTOR
R16	4822 116 81636	RESISTOR (/95)
R16	4822 116 81696	RESISTOR (/57/75)
R17	4822 116 83156	RESISTOR
R18	4822 116 83159	RESISTOR
R19	4822 116 83159	RESISTOR
R20	4822 116 83156	RESISTOR
R21	4822 116 83159	RESISTOR
R22	4822 116 83156	RESISTOR
R23	4822 116 83159	RESISTOR
R24	4822 116 83156	RESISTOR
R25	4822 116 83183	RESISTOR
R27	4822 116 83165	RESISTOR
R28	4822 116 83188	RESISTOR
R29	4822 116 83168	RESISTOR
R30	4822 116 83163	RESISTOR
R32	4822 116 83344	RESISTOR (/57/95)
R32	4822 116 83194	RESISTOR (/75)
R35	4822 116 83174	RESISTOR
R36	4822 116 83144	RESISTOR
R38	4822 116 83159	RESISTOR (/95)
R38	4822 116 83155	RESISTOR (/57/75)
R39	4822 116 83159	RESISTOR
R40	4822 100 11926	V RESISTOR,RF AGC
R41	4822 116 83177	RESISTOR
R42	4822 116 83177	RESISTOR
R43	4822 116 83145	RESISTOR
R44	4822 116 83174	RESISTOR (/95)
R44	4822 117 10049	RESISTOR (/57/75)
R45	4822 116 83154	RESISTOR
R46	4822 117 10016	RESISTOR (/95)
R47	4822 116 83163	RESISTOR (/95)
R47	4822 116 83145	RESISTOR (/57/75)
R48	4822 116 83196	RESISTOR
R50	4822 116 83144	RESISTOR (/95)
R50	4822 116 83142	RESISTOR (/57/75)
R51	4822 116 83168	RESISTOR
R53	4822 116 83148	RESISTOR
R54	4822 116 83193	RESISTOR
R55	4822 117 10019	RESISTOR
R56	4822 116 83195	RESISTOR
R60	4822 116 83181	RESISTOR
R61	4822 116 83162	RESISTOR
R62	4822 116 83151	RESISTOR
R63	4822 116 83164	RESISTOR
R64	4822 116 83196	RESISTOR
R65	4822 116 83168	RESISTOR
R68	4822 116 83156	RESISTOR
R69	4822 116 83142	RESISTOR (/95)
R70	4822 116 83175	RESISTOR
R71	4822 116 83159	RESISTOR
R72	4822 116 83146	RESISTOR
R73	4822 116 83163	RESISTOR
R76	4822 116 83185	RESISTOR (/95)
R77	4822 116 83185	RESISTOR (/95)
R78	4822 116 83174	RESISTOR (/95)
R80	4822 116 83161	RESISTOR
R81	4822 116 83197	RESISTOR
R85	4822 116 83147	RESISTOR (/95)
R86	4822 116 83147	RESISTOR (/95)
R87	4822 116 83335	RESISTOR
R88	4822 116 83196	RESISTOR
R91	4822 116 83183	RESISTOR
R92	4822 116 83142	RESISTOR (/95)
R92	4822 116 83181	RESISTOR (/57)
R92	4822 126 12469	CAPACITOR (/75)
R93	4822 116 83174	RESISTOR
R96	4822 116 83164	RESISTOR
R99	4822 116 83175	RESISTOR
C2	4822 124 23864	E CAPACITOR
C4	4822 124 23862	E CAPACITOR
C6	4822 124 23866	E CAPACITOR
C8	4822 214 80018	E CAPACITOR
C9	4822 121 43963	M CAPACITOR
C10	4822 121 43966	M CAPACITOR
C13	4822 126 11647	CAPACITOR
C14	4822 124 23864	E CAPACITOR
C15	4822 124 23865	E CAPACITOR
C17	4822 126 11851	CAPACITOR (/57/95)
C18	4822 126 11852	CAPACITOR (/57/95)
C20	4822 124 23874	E CAPACITOR
C22	4822 126 11611	CAPACITOR
C23	4822 124 23865	E CAPACITOR
C24	4822 126 11634	CAPACITOR
C26	4822 124 23826	E CAPACITOR
C27	4822 126 11611	CAPACITOR
C28	4822 121 43971	M CAPACITOR
C29	4822 126 11612	CAPACITOR
C30	4822 124 80344	E CAPACITOR
C31	4822 126 11645	CAPACITOR (/95)
C35	4822 124 23831	E CAPACITOR
C40	4822 121 43969	M CAPACITOR
C41	4822 124 23873	E CAPACITOR (/95)
C41	4822 124 23863	E CAPACITOR (/57/75)
C52	4822 124 23866	E CAPACITOR (/95)
C59	4822 124 23861	E CAPACITOR
C64	4822 126 11614	CAPACITOR
C66	4822 126 11835	CAPACITOR
C67	4822 126 12551	CAPACITOR (/95)
C69	4822 126 11836	CAPACITOR
C77	4822 126 11613	CAPACITOR (/95)
C77	4822 116 81545	RESISTOR (/57/75)
C78	4822 126 11611	CAPACITOR (/57/75)
C79	4822 126 11611	CAPACITOR
C85	4822 126 11849	CAPACITOR (/95)
C86	4822 126 12429	CAPACITOR
C87	4822 124 80311	E CAPACITOR
C91	4822 126 11837	CAPACITOR (/57)
C91	4822 126 12468	CAPACITOR (/75)
L3	4822 157 70382	COIL (/95)
L3	4822 157 63578	COIL (/57)
L3	4822 157 63562	COIL (/75)
L4	4822 157 63404	COIL (/95/75)
L4	4822 157 70186	COIL (/57)
L5	4822 157 62371	COIL
L6	4822 157 70128	COIL
L7	4822 157 62378	COIL (/95)
L8	4822 153 10397	COIL (/95)
L9	4822 157 62377	COIL
L10	4822 157 63579	COIL (/95)
L11	4822 157 70384	COIL (/95)
L12	4822 157 90197	COIL
TR1	$ 4822 210 10525	TUNER (/95)
TR1	$ 4822 210 10511	TUNER (/57)
TR1	$ 4822 210 10513	TUNER (/75)
CF1	4822 242 80335	CERAMIC FILTER /95/75
CF1	4822 242 80396	CERAMIC FILTER (/57)
CF2	4822 242 81412	CERAMIC FILTER (/95)
CF2	4822 242 80398	CERAMIC FILTER (/57)
CF2	4822 242 80337	CERAMIC FILTER (/75)
CF3	4822 242 80337	CERAMIC FILTER (/95)
SAW1	4822 242 80388	SAW FILTER (/95/75)
SAW1	4822 242 81322	SAW FILTER (/57)
SAW2	4822 242 81411	SAW FILTER (/95)
T1	4822 157 63576	LC TRAP
T2	4822 148 81201	IF.TRANSMER (/95)
T2	4822 157 63577	COIL (/57)
T2	4822 157 63391	COIL (/75)
T3	4822 148 81198	IF.TRANSMER,AFC
T4	4822 148 81197	IF.TRANSMER,VCO
WR1	4822 321 61775	COAXIAL CABLE
IC280	4822 209 30415	IC (/95)
Q201	4822 130 42483	TRANSISTOR
Q202	4822 130 42483	TRANSISTOR
Q206	4822 130 42483	TRANSISTOR
Q207	4822 130 42483	TRANSISTOR
Q210	4822 130 63144	TRANSISTOR
Q211	4822 130 63144	TRANSISTOR
Q213	4822 130 42483	TRANSISTOR
Q214	4822 130 63144	TRANSISTOR
Q217	4822 130 60591	TRANSISTOR
D281	$ 4822 130 32778	DIODE (/95)
R201	4822 116 83145	RESISTOR
R202	4822 116 83164	RESISTOR
R203	4822 116 83164	RESISTOR
R206	4822 116 83144	RESISTOR
R208	4822 111 41432	RESISTOR
R209	4822 116 83155	RESISTOR
R210	4822 116 83189	RESISTOR
R211	4822 116 83176	RESISTOR
R212	4822 116 83156	RESISTOR
R213	4822 116 83163	RESISTOR
R214	4822 116 83191	RESISTOR
R215	4822 100 11927	V RES,SP REC COLOR
R216	4822 116 83156	RESISTOR
R217	4822 116 83146	RESISTOR
R218	4822 116 83145	RESISTOR
R227	4822 111 41568	RESISTOR
R229	4822 116 83151	RESISTOR
R230	4822 116 83146	RESISTOR
R240	4822 116 83145	RESISTOR
R242	4822 116 81536	RESISTOR
R243	4822 116 83145	RESISTOR
R244	4822 116 83155	RESISTOR
R245	4822 116 83145	RESISTOR
R246	4822 100 11925	V RESISTOR,REC FM
R247	4822 116 83174	RESISTOR
R248	4822 116 83145	RESISTOR
R249	4822 116 83191	RESISTOR
R250	4822 116 83194	RESISTOR
R251	4822 116 83194	RESISTOR
R257	4822 116 83186	RESISTOR
R258	4822 116 81751	RESISTOR
R259	4822 116 81695	RESISTOR
R264	4822 116 83174	RESISTOR
R265	4822 116 83145	RESISTOR
R268	4822 116 83142	RESISTOR
R280	4822 116 83337	RESISTOR (/95)
R281	4822 116 83191	RESISTOR (/95)
R282	4822 116 83178	RESISTOR (/95)
R283	4822 050 11004	RESISTOR (/95)
R284	4822 116 83169	RESISTOR (/95)
R286	4822 116 81638	RESISTOR (/95)
C201	4822 126 11601	CAPACITOR
C202	4822 126 11602	CAPACITOR
C203	4822 126 11601	CAPACITOR
C204	4822 126 11601	CAPACITOR
C205	4822 124 23825	E CAPACITOR
C206	4822 126 11601	CAPACITOR
C207	4822 126 11601	CAPACITOR
C208	4822 126 11601	CAPACITOR
C209	4822 126 11601	CAPACITOR
C212	4822 124 80346	E CAPACITOR
C213	4822 126 11601	CAPACITOR
C214	4822 124 23859	E CAPACITOR
C215	4822 124 23841	E CAPACITOR

87	4822 403 70737		CLEANER BASE ASSY
87A	4822 403 70716		CLEANER BASE
87B	4822 528 90858		CLEANER
87C	4822 528 90859		ROLLER
87D	4822 532 12192		SLIT WASHER
90	4822 492 52334		COMPRESSION SPRING
100	4822 691 20783		MAIN DECK ASSEMBLY
100A	4822 492 70943		EARTH PLATE
100B	4822 502 13828		SCREW

POWER SUPPLY ASSEMBLY

Q1	4822 130 62795		TRANSISTOR
Q2	4822 130 62794		TRANSISTOR
Q3	4822 130 42431		TRANSISTOR
D1	4822 130 82698		DIODE
D2	4822 130 82698		DIODE
D3	4822 130 82698		DIODE
D4	4822 130 82698		DIODE
D5	4822 130 82686		FR DIODE
D6	4822 130 82686		FR DIODE
D7	4822 130 32778	$	DIODE
D8	4822 130 83155		DIODE
D11	4822 130 32778	$	DIODE
D13	4822 130 82768		FR DIODE
D14	4822 130 82696		FR DIODE
D15	4822 130 81377		DIODE
D16	4822 130 82768		FR DIODE
D17	4822 130 83156		ZENER DIODE
D19	4822 130 82692		ZENER DIODE
D21	4822 130 82693		ZENER DIODE
D22	4822 130 32778	$	DIODE
R3	4822 111 50565		RESISTOR
R4	4822 111 50565		RESISTOR
R5	4822 111 30976		RESISTOR
R6	4822 117 10009		OMF RESISTOR
R7	4822 117 10008		OMF RESISTOR
R8	4822 116 81729		RESISTOR
R9	4822 117 10052		MF RESISTOR
R10	4822 050 11202		RESISTOR
R16	4822 117 10007		OMF RESISTOR
R17	4822 116 83202	$	FUSIBLE RESISTOR
R20	4822 116 81729		RESISTOR
R21	4822 050 23741		CMF RESISTOR
R22	4822 050 24871		CMF RESISTOR
R23	4822 050 11202		RESISTOR
R24	4822 117 10011		MF RESISTOR
C2	4822 121 70234		M CAPACITOR
C3	4822 121 70234		M CAPACITOR
C4	4822 126 12434		CAPACITOR
C6	4822 126 12432		CAPACITOR
C7	4822 126 12432		CAPACITOR
C8	4822 126 12432		CAPACITOR
C10	4822 126 12433	$	CAPACITOR
C12	4822 124 23819		E CAPACITOR
C13	4822 124 23852		E CAPACITOR
C14	4822 124 11223		CAPACITOR
C15	4822 126 11615		CAPACITOR
C16	4822 121 43972		MM CAPACITOR
C17	4822 121 43958		M CAPACITOR
C21	4822 124 80384		E CAPACITOR
C23	4822 124 23856		E CAPACITOR
C24	4822 124 23834		E CAPACITOR
C25	4822 124 23872		E CAPACITOR
C26	4822 124 23853		E CAPACITOR
C29	4822 121 20242		E CAPACITOR
C30	4822 121 43958		M CAPACITOR
C31	4822 124 80301		E CAPACITOR
C32	4822 124 80299		E CAPACITOR
L3	4822 157 70119		COIL
L4	4822 157 70119		COIL
PC1	4822 130 82535	$	PHOTO COUPLER
POC1	4822 321 10898		POWER CORD
T1	4822 148 81186	$	SW TRANS
CL1	4822 265 30707		FUSE CLIP, X2, FUSE
ETH1	4822 492 71207		E.PLATE(R/B)
HD1	4822 401 11312		STRAIN RELIEF
HS1	4822 255 41272		HEAT SINK
LF2	4822 121 20261	$	LINE FILTER
SCW1	4822 502 21251		SCREW
SCW2	4822 502 30597		SCREW
SLD1	4822 466 93165		S.CASE(S/R)
SLD2	4822 466 93166		S.COVER(S/R)
CN1	4822 265 41259		CONNECTOR
CP1	4822 209 63611	$	CIRCUIT PROTECTOR
F1	4822 253 30407		FUSE, T1.25A

MAIN BOARD ASSEMBLY

PWBA	4822 214 33889		MAIN BOARD ASSY
RF1	4822 214 33887		RF CONVERTER
D953	4822 130 32778	$	DIODE
D954	4822 130 32778	$	DIODE
CL1	4822 401 11468		WIRE CLAMP, X2
ETH1	4822 403 70459		EARTH PLATE, TERM BD
JA2	4822 264 30321		PIN JACK, V IN/OUT
JA4	4822 264 30319		PIN JACK, A IN/OUT
SCW1	4822 502 13827		SCREW, FOR RF1
SCW2	4822 502 13817		SCREW, FOR TERMINAL
SPC2	4822 466 62292		SHEET(TERMINAL)
TB1	4822 290 81572		TERMINAL BOARD ASSY
TR1	4822 210 10525	$	TUNER
IC1	4822 209 31726		IC
IC2	4822 209 30246		IC
Q1	4822 130 42431		TRANSISTOR
Q2	4822 130 62589		TRANSISTOR
Q3	4822 130 60588		TRANSISTOR
Q4	4822 130 60161		TRANSISTOR
Q5	4822 130 60161		TRANSISTOR
Q6	4822 130 60161		TRANSISTOR
Q7	4822 130 61187		TRANSISTOR
Q9	4822 130 41651		TRANSISTOR
Q10	4822 130 42594		TRANSISTOR
Q11	4822 130 62796		FE TRANSISTOR
Q12	4822 130 42594		TRANSISTOR
Q13	4822 130 42431		TRANSISTOR
Q15	4822 130 42431		TRANSISTOR
Q17	4822 130 60161		TRANSISTOR
Q18	4822 130 61544		TRANSISTOR
Q19	4822 130 60161		TRANSISTOR
Q23	4822 130 62793		TRANSISTOR
D1	4822 209 83931		ZENER DIODE
D3	4822 130 82772		V.DIODE
D5	4822 130 82689		ZENER DIODE
R3	4822 116 83193		RESISTOR
R5	4822 116 83183		RESISTOR

R7	4822 116 83145	RESISTOR
R8	4822 116 83164	RESISTOR
R9	4822 116 83157	RESISTOR
R10	4822 116 83157	RESISTOR
R13	4822 116 83167	RESISTOR
R14	4822 116 83176	RESISTOR
R15	4822 116 83146	RESISTOR
R16	4822 116 81696	RESISTOR
R17	4822 116 83156	RESISTOR
R18	4822 116 83159	RESISTOR
R19	4822 116 83159	RESISTOR
R20	4822 116 83156	RESISTOR
R21	4822 116 83159	RESISTOR
R22	4822 116 83156	RESISTOR
R23	4822 116 83159	RESISTOR
R24	4822 116 83156	RESISTOR
R25	4822 116 83183	RESISTOR
R27	4822 116 83165	RESISTOR
R28	4822 116 83188	RESISTOR
R29	4822 116 83168	RESISTOR
R30	4822 116 83163	RESISTOR
R32	4822 116 83344	RESISTOR
R36	4822 116 83144	RESISTOR
R38	4822 116 83159	RESISTOR
R39	4822 116 83159	RESISTOR
R40	4822 100 11926	V RESISTOR, RF AGC
R41	4822 116 83177	RESISTOR
R42	4822 116 83177	RESISTOR
R43	4822 116 83145	RESISTOR
R44	4822 116 83174	RESISTOR
R45	4822 116 83154	RESISTOR
R46	4822 117 10016	RESISTOR
R47	4822 116 83163	RESISTOR
R48	4822 116 83196	RESISTOR
R50	4822 116 83144	RESISTOR
R51	4822 116 83168	RESISTOR
R53	4822 116 83148	RESISTOR
R54	4822 116 83193	RESISTOR
R55	4822 117 10019	RESISTOR
R56	4822 116 83195	RESISTOR
R60	4822 116 83181	RESISTOR
R61	4822 116 83162	RESISTOR
R62	4822 116 83151	RESISTOR
R63	4822 116 83164	RESISTOR
R64	4822 116 83196	RESISTOR
R65	4822 116 83168	RESISTOR
R68	4822 116 83156	RESISTOR
R69	4822 116 83142	RESISTOR
R70	4822 116 83175	RESISTOR
R71	4822 116 83159	RESISTOR
R72	4822 116 83146	RESISTOR
R73	4822 116 83163	RESISTOR
R76	4822 116 83185	RESISTOR
R77	4822 116 83185	RESISTOR
R78	4822 116 83174	RESISTOR
R80	4822 116 83161	RESISTOR
R81	4822 116 83197	RESISTOR
R85	4822 116 83147	RESISTOR
R86	4822 116 83147	RESISTOR
R87	4822 116 83335	RESISTOR
R88	4822 116 83196	RESISTOR
R91	4822 116 83183	RESISTOR
R92	4822 116 83142	RESISTOR
R93	4822 116 83174	RESISTOR
R96	4822 116 83164	RESISTOR
R99	4822 116 83175	RESISTOR

C2	4822 124 23864	E CAPACITOR
C4	4822 124 23862	E CAPACITOR
C6	4822 124 23866	E CAPACITOR
C8	4822 214 80018	E CAPACITOR
C9	4822 121 43963	M CAPACITOR
C10	4822 121 43966	M CAPACITOR
C13	4822 126 11647	CAPACITOR
C14	4822 124 23864	E CAPACITOR
C15	4822 124 23865	E CAPACITOR
C17	4822 126 12431	CAPACITOR
C18	4822 126 12387	CAPACITOR
C20	4822 124 23874	E CAPACITOR
C22	4822 126 11611	CAPACITOR
C23	4822 124 23865	E CAPACITOR
C24	4822 126 11634	CAPACITOR
C26	4822 124 23826	E CAPACITOR
C27	4822 126 11611	CAPACITOR
C28	4822 121 43971	M CAPACITOR
C29	4822 126 11612	CAPACITOR
C30	4822 124 80344	E CAPACITOR
C31	4822 126 11645	CAPACITOR
C35	4822 124 23831	E CAPACITOR
C40	4822 121 43969	M CAPACITOR
C41	4822 124 23873	E CAPACITOR
C52	4822 124 23866	E CAPACITOR
C59	4822 124 23861	E CAPACITOR
C64	4822 126 11614	CAPACITOR
C66	4822 126 11835	CAPACITOR
C67	4822 126 12551	CAPACITOR
C69	4822 126 11836	CAPACITOR
C77	4822 126 11613	CAPACITOR
C79	4822 126 11611	CAPACITOR
C85	4822 126 11849	CAPACITOR
C86	4822 126 12429	CAPACITOR
C87	4822 124 80311	E CAPACITOR
L3	4822 157 70382	COIL
L4	4822 157 63404	COIL
L5	4822 157 62371	COIL
L6	4822 157 70128	COIL
L7	4822 157 62378	COIL
L8	4822 153 10397	COIL
L9	4822 157 62377	COIL
L10	4822 157 63579	COIL
L11	4822 157 70384	COIL
L12	4822 157 90197	COIL
CF1	4822 242 80335	CERAMIC FILTER
CF2	4822 242 81412	CERAMIC FILTER
CF3	4822 242 80337	CERAMIC FILTER
SAW1	4822 242 80388	SAW FILTER
SAW2	4822 242 81411	SAW FILTER
T1	4822 157 63576	LC TRAP
T2	4822 148 81201	IF.TRANSFORMER
T3	4822 148 81198	IF.TRANSFORMER
T4	4822 148 81197	IF.TRANSFORMER
WR1	4822 321 61775	COAXIAL CABLE
IC280	4822 209 30415	IC
Q201	4822 130 42431	TRANSISTOR
Q202	4822 130 42431	TRANSISTOR
Q204	4822 130 42683	TRANSISTOR
Q205	4822 130 42683	TRANSISTOR
Q206	4822 130 42431	TRANSISTOR
Q207	4822 130 42431	TRANSISTOR
Q208	4822 130 42431	TRANSISTOR
Q210	4822 130 63144	TRANSISTOR

C216	4822 124 80323	E CAPACITOR
C217	4822 126 11601	CAPACITOR
C226	4822 126 11603	CAPACITOR
C227	4822 126 11601	CAPACITOR
C228	4822 126 11601	CAPACITOR
C229	4822 126 12428	CAPACITOR
C235	4822 126 11612	CAPACITOR
C280	4822 124 80317	E CAPACITOR (/95)
C281	4822 124 80355	E CAPACITOR (/95)
C282	4822 126 11858	CAPACITOR (/95)
C284	4822 126 11601	CAPACITOR (/95)
C285	4822 126 11601	CAPACITOR (/95)
C286	4822 126 11601	CAPACITOR (/95)
C287	4822 126 11601	CAPACITOR (/95)
C288	4822 121 70009	M CAPACITOR (/95)
C289	4822 126 11833	CAPACITOR (/95)
C290	4822 126 11654	CAPACITOR (/95)
C291	4822 126 11603	CAPACITOR (/95)
C293	4822 124 42276	E CAPACITOR (/95)
C294	4822 126 11601	CAPACITOR (/95)
C295	4822 126 12386	CAPACITOR (/95)
L201	4822 157 60104	COIL
L202	4822 157 62375	COIL
L203	4822 157 70191	COIL
L204	4822 157 60104	COIL
L206	4822 157 2373	COIL
L280	4822 157 60104	COIL (/95)
L282	4822 157 63582	COIL (/95)
CN201	4822 265 41142	CONNECTOR
IC301	4822 209 31725	IC
D302$	4822 130 32778	DIODE (/57)
D351$	4822 130 32778	DIODE (/57)
Q301	4822 130 42483	TRANSISTOR (/95)
Q301	4822 130 63163	TRANSISTOR (/57/75)
Q302	4822 130 63163	TRANSISTOR (/95)
Q302	4822 130 42483	TRANSISTOR (/57/75)
Q304	4822 130 42483	TRANSISTOR (/95)
Q304	4822 130 63163	TRANSISTOR (/57/75)
EQ201	4822 214 33842	EQUALIZER (/75)
R301	4822 050 11009	RESISTOR
R302	4822 116 83193	RESISTOR
R303	4822 116 83186	RESISTOR
R304	4822 116 83164	RESISTOR
R305	4822 116 83176	RESISTOR
R306	4822 116 83179	RESISTOR
R308	4822 116 83183	RESISTOR
R309	4822 116 83172	RESISTOR
R310	4822 116 83146	RESISTOR
R311	4822 116 81543	RESISTOR
R313	4822 117 10017	RESISTOR
R314	4822 116 83185	RESISTOR
R315	4822 116 83189	RESISTOR
R316	4822 116 83149	RESISTOR
R317	4822 111 30983	RESISTOR
R318	4822 116 83176	RESISTOR
R320	4822 117 10051	RESISTOR
R321	4822 116 83171	RESISTOR
R322	4822 116 83146	RESISTOR
R323	4822 116 83146	RESISTOR
R324	4822 116 83184	RESISTOR
R325	4822 116 83196	RESISTOR
R326	4822 116 83169	RESISTOR
R327	4822 116 81537	RESISTOR
R328	4822 050 23903	RESISTOR
R329	4822 116 83144	RESISTOR
R330	4822 116 83182	RESISTOR
R331	4822 116 83156	RESISTOR
R332	4822 111 30974	RESISTOR
R333	4822 117 10018	RESISTOR
R343	4822 116 83145	RESISTOR (/57)
R344	4822 111 30974	RESISTOR,SILK D301
R345	$ 4822 117 10053	FUSIBLE RESISTOR
R346	4822 116 83159	RESISTOR (/57)
R348	4822 111 41569	RESISTOR (/57/95)
R348	4822 111 30986	RESISTOR (/75)
R349	4822 111 30937	RESISTOR
C301	4822 126 11646	CAPACITOR
C302	4822 121 70195	M CAPACITOR
C303	4822 124 80313	E CAPACITOR
C304	4822 126 11654	CAPACITOR
C305	4822 126 12389	CAPACITOR
C306	4822 126 12427	CAPACITOR
C307	4822 126 12389	CAPACITOR
C308	4822 126 12391	CAPACITOR
C311	4822 124 23822	E CAPACITOR (/57/95)
C312	4822 124 23873	E CAPACITOR
C313	4822 126 11649	CAPACITOR
C314	4822 124 23832	E CAPACITOR
C315	4822 124 23827	E CAPACITOR
C316	4822 124 23873	E CAPACITOR
C317	4822 124 23874	E CAPACITOR
C318	4822 124 23863	E CAPACITOR
C319	4822 121 70208	M CAPACITOR
C321	4822 124 80345	TF CAPACITOR
C327	4822 126 11601	CAPACITOR (/57/95)
C327	4822 126 11647	CAPACITOR (/75)
L301	4822 157 70185	COIL
T301	4822 148 81187	OSC TRANSFORMER
CN302	4822 265 20527	CONNECTOR
IC401	4822 209 30235	IC
IC402	4822 209 80587	IC (/57/75)
IC451	4822 209 30234	IC
D402	$ 4822 130 32778	DIODE
D403	$ 4822 130 32778	DIODE
D405	$ 4822 130 32778	DIODE
D406	4822 130 81737	ZENER DIODE (/95/75)
D406	4822 130 80373	ZENER DIODE (/57)
D409	$ 4822 130 32778	DIODE
R401	4822 116 83183	RESISTOR
R402	4822 100 11928	SW POINT (/57/95)
R402	4822 100 11975	V RESISTOR,SWITC (/75)
R403	4822 116 83145	RESISTOR
R404	4822 116 81694	RESISTOR
R406	4822 111 50565	RESISTOR
R408	4822 116 81694	RESISTOR
R410	4822 116 83165	RESISTOR
R412	4822 116 83148	RESISTOR
R413	4822 116 83169	RESISTOR
R414	4822 116 83182	RESISTOR
R415	4822 116 83182	RESISTOR
R416	4822 050 11004	RESISTOR
R417	4822 116 83151	RESISTOR
R418	4822 116 83166	RESISTOR
R419	4822 117 10019	RESISTOR
R420	4822 116 83164	RESISTOR
R421	4822 116 83163	RESISTOR
R422	4822 116 83145	RESISTOR
R423	4822 116 83145	RESISTOR
R424	4822 116 83154	RESISTOR
R425	4822 116 83146	RESISTOR
R426	4822 117 10019	RESISTOR
R429	4822 116 83184	RESISTOR
R430	4822 116 83157	RESISTOR
R431	4822 116 83146	RESISTOR
R433	4822 116 83148	RESISTOR
R434	4822 116 83164	RESISTOR
R440	4822 116 83145	RESISTOR
R450	4822 111 30985	RESISTOR
R451	4822 116 83145	RESISTOR
R452	4822 116 83163	RESISTOR
R453	4822 116 83168	RESISTOR
R458	4822 116 83152	RESISTOR
C401	4822 121 43355	M CAPACITOR (/57/95)
C401	4822 121 70211	M CAPACITOR (/75)
C402	4822 126 11612	CAPACITOR
C403	4822 126 11654	CAPACITOR
C405	4822 126 11611	CAPACITOR
C407	4822 126 11613	CAPACITOR
C409	4822 126 11611	CAPACITOR
C411	4822 124 80306	E CAPACITOR
C412	4822 124 80306	E CAPACITOR
C413	4822 126 11652	CAPACITOR
C414	4822 126 12456	CAPACITOR
C415	4822 121 70214	TF CAPACITOR
C416	4822 126 11653	CAPACITOR
C417	4822 126 11612	CAPACITOR
C418	4822 124 23826	E CAPACITOR
C419	4822 126 12374	CAPACITOR
C420	4822 124 23826	E CAPACITOR
C421	4822 124 80353	E CAPACITOR
C422	4822 126 11612	CAPACITOR
C423	4822 126 11612	CAPACITOR
C424	4822 124 80305	E CAPACITOR
C425	4822 126 12375	CAPACITOR
C426	4822 121 70268	M CAPACITOR
C427	4822 124 23873	E CAPACITOR (/57/95)
C427	4822 124 23826	E CAPACITOR (/75)
C428	4822 124 23873	E CAPACITOR (/57/95)
C428	4822 124 23826	E CAPACITOR (/75)
C429	4822 126 12554	CAPACITOR (/57/95)
C429	4822 126 12375	CAPACITOR (/75)
C452	4822 126 11611	CAPACITOR
C454	4822 126 12372	CAPACITOR (/57/75)
C455	4822 126 11611	CAPACITOR
C456	4822 121 70213	M CAPACITOR
C457	4822 126 11611	CAPACITOR
C458	4822 124 80305	E CAPACITOR
C459	4822 126 11611	CAPACITOR
L451	4822 157 90157	COIL
CN401	4822 265 20527	CONNECTOR
CN402	4822 265 30909	CONNECTOR
CP401	$ 5322 157 53342	CIRCUIT PROTECTOR
IC601	4822 209 32128	IC (/57/95)
IC601	4822 209 31832	IC (/75)
IC602	4822 209 30236	IC
Q601	4822 130 62503	TRANSISTOR
D601	$ 4822 130 32778	DIODE
D602	4822 130 80684	ZENER DIODE
D603	$ 4822 130 32778	DIODE
D604	$ 4822 130 32778	DIODE
D605	$ 4822 130 32778	DIODE
D606	$ 4822 130 32778	DIODE
R602	4822 116 83145	RESISTOR
R603	4822 116 83145	RESISTOR
R604	4822 116 83145	RESISTOR
R605	4822 116 83182	RESISTOR
R606	4822 116 83182	RESISTOR
R607	4822 116 81641	RESISTOR
R608	4822 116 83182	RESISTOR
R609	4822 116 83145	RESISTOR
R610	4822 116 83182	RESISTOR
R611	4822 116 83182	RESISTOR
R612	4822 116 83182	RESISTOR
R613	4822 116 81641	RESISTOR
R615	4822 116 83182	RESISTOR
R616	4822 116 83182	RESISTOR
R617	4822 116 81641	RESISTOR
R618	4822 116 83182	RESISTOR
R619	4822 116 83182	RESISTOR
R620	4822 116 83181	RESISTOR
R621	4822 116 81641	RESISTOR
R622	4822 116 81641	RESISTOR
R623	4822 116 83148	RESISTOR
R624	4822 116 81641	RESISTOR
R625	4822 116 83146	RESISTOR
R626	4822 116 81694	RESISTOR
R627	4822 116 83161	RESISTOR (/95)
R627	4822 116 83157	RESISTOR (/57/75)
R628	4822 116 83176	RESISTOR
R629	4822 116 81636	RESISTOR
R630	4822 116 81636	RESISTOR
R631	4822 116 81636	RESISTOR
R632	4822 050 15603	RESISTOR
R633	4822 116 83181	RESISTOR
R634	4822 116 83176	RESISTOR
R635	4822 116 81636	RESISTOR
R636	4822 116 83191	RESISTOR
R637	4822 116 83146	RESISTOR (/57/95)
R638	4822 116 83146	RESISTOR (/75)
R640	4822 116 83146	RESISTOR
C601	4822 126 11636	CAPACITOR
C602	4822 124 80355	E CAPACITOR
C603	4822 126 10489	CAPACITOR (/57/75)
C604	4822 124 23832	E CAPACITOR
C605	4822 126 11639	CAPACITOR
C606	4822 124 23824	E CAPACITOR
C607	4822 126 12445	CAPACITOR
C615	4822 126 12436	CAPACITOR
C616	4822 126 11612	CAPACITOR
C617	4822 126 11832	CAPACITOR
C618	4822 126 11832	CAPACITOR
C619	4822 126 11614	CAPACITOR (/95)
C619	4822 126 10419	CAPACITOR (/57/75)
L601	4822 157 62372	COIL
CF601	4822 242 81305	RESONATOR
CN601	4822 265 41257	FFC CONNECTOR
CN602	4822 265 30912	CONNECTOR
CP601	$ 4822 209 63612	CIRCUIT PROTECTOR
D953	$ 4822 130 32778	DIODE
D954	$ 4822 130 32778	DIODE
Q901	4822 130 42593	TRANSISTOR (/57)
R953	4822 116 83142	RESISTOR
L901	4822 157 60438	COIL
L904	4822 157 60438	COIL
L965	4822 157 62372	COIL (/57)

L965		4822 157 70373	COIL (/75)
S1		4822 277 21556	SLIDE SWITCH (/57)
Q801		4822 130 62794	TRANSISTOR
Q802		4822 130 62801	TRANSISTOR
Q803		4822 130 42483	TRANSISTOR
Q804		4822 130 42483	TRANSISTOR (/57/75)
Q805		4822 130 60591	TRANSISTOR
Q806		4822 130 61892	TRANSISTOR
D801		4822 130 83314	ZENER DIODE (/95)
D802	$	4822 130 32778	DIODE (/95)
R801		4822 116 81729	RESISTOR
R802		4822 116 81536	RESISTOR
R803		4822 116 81536	RESISTOR (/95)
R803		4822 116 81637	RESISTOR (/57/75)
R804		4822 116 81729	RESISTOR
R805		4822 100 11902	V RESISTOR,SWD 5V
R806		4822 116 81729	RESISTOR
R807		4822 116 82085	RESISTOR
R808		4822 116 81729	RESISTOR
R809		4822 116 81639	RESISTOR
R810		4822 116 81636	RESISTOR (/95)
C801		4822 126 11647	CAPACITOR
C802		4822 124 80308	E CAPACITOR (/57/75)
C803		4822 124 80308	E CAPACITOR
C804		4822 124 23873	E CAPACITOR
C805		4822 124 23839	E CAPACITOR
C806		4822 124 80311	E CAPACITOR
L801		4822 157 60104	COIL
CN801		4822 265 41262	WIRE TRAP
CN802		4822 403 70458	WIRE TRAP
CP801	$	4822 209 63611	CIRCUIT PROTECTOR

PRE/REC BOARD ASSEMBLY

PWBA2		4822 214 33888	PRE/REC BOARD ASSY
IC501		4822 209 30241	IC
Q501		4822 130 63144	TRANSISTOR
Q502		4822 130 42483	TRANSISTOR
Q504		4822 130 42483	TRANSISTOR
D502	$	4822 130 32778	DIODE
R502		4822 116 82084	RESISTOR
R503		4822 116 81542	RESISTOR
R504		4822 116 81542	RESISTOR
R505		4822 116 81639	RESISTOR
R506		4822 116 81639	RESISTOR
R507		4822 116 82086	RESISTOR
R508		4822 116 81727	RESISTOR
R509		4822 116 81537	RESISTOR
R510		4822 111 30962	RESISTOR
R511		4822 111 30961	RESISTOR
R512		4822 116 81543	RESISTOR
R516		4822 050 11202	RESISTOR
R517		4822 116 81538	RESISTOR
R518		4822 116 81637	RESISTOR
R519		4822 116 81638	RESISTOR
R520		4822 116 81536	RESISTOR
R521		4822 116 81638	RESISTOR
R522		4822 111 30963	RESISTOR
R523		4822 116 81536	RESISTOR
R524		4822 050 11203	RESISTOR
R525		4822 050 16802	RESISTOR
R528		4822 116 81543	RESISTOR
C502		4822 126 11647	CAPACITOR
C503		4822 126 11643	CAPACITOR
C504		4822 126 11647	CAPACITOR
C507		4822 126 10425	CAPACITOR
C509		4822 124 23821	E CAPACITOR
C511		4822 126 11647	CAPACITOR
C514		4822 121 70269	TF CAPACITOR
C515		4822 126 11647	CAPACITOR
C516		4822 121 70267	M CAPACITOR
C517		4822 121 70267	M CAPACITOR
C518		4822 126 11647	CAPACITOR
C519		4822 126 11647	CAPACITOR
C520		4822 126 11689	CAPACITOR
C524		4822 126 11629	CAPACITOR
C526		4822 126 11647	CAPACITOR
C528		4822 124 11224	TANTAL CAPACITOR
C529		4822 126 11641	CAPACITOR
C530		4822 124 23837	E CAPACITOR
C532		4822 126 11599	CAPACITOR
L503		4822 157 62378	COIL
L504		4822 157 90157	COIL
L506		4822 157 62373	COIL
L507		4822 157 60104	COIL
L510		4822 157 60104	COIL
SLD1		4822 466 62265	SHIELD CASE
SLD2		4822 466 62266	SHIELD COVER
CN501		4822 265 41258	CONNECTOR
CN503		4822 267 51109	CONNECTOR (/95/75)

VIDEO UNIT BOARD ASSEMBLY

PWBA		4822 214 33811	VIDEO UNIT ASSY/95/75
SLD1		4822 466 62069	SHIELD PLATE
SLD2		4822 466 62284	SHIELD CASE
IC1		4822 209 31735	IC
IC2		4822 209 30243	IC
Q1		4822 130 60862	TRANSISTOR
Q5		4822 130 60862	TRANSISTOR
Q10		4822 130 60669	TRANSISTOR
Q11		4822 130 60997	TRANSISTOR
Q12		4822 130 60997	TRANSISTOR
Q13		4822 130 60997	TRANSISTOR
Q14		4822 130 60997	TRANSISTOR
Q18		4822 130 60669	TRANSISTOR
Q19		4822 130 60669	TRANSISTOR
Q20		4822 130 60669	TRANSISTOR
Q21		4822 130 60862	TRANSISTOR
Q23		4822 130 60997	TRANSISTOR
Q24		4822 130 60862	TRANSISTOR
Q25		4822 130 60669	TRANSISTOR
Q26		4822 130 60669	TRANSISTOR
Q28		4822 130 60669	TRANSISTOR
Q29		4822 130 60669	TRANSISTOR
Q30		4822 130 60669	TRANSISTOR
Q31		4822 130 60854	TRANSISTOR
Q32		4822 130 60997	TRANSISTOR
Q33		4822 130 63164	TRANSISTOR
D1		4822 130 82708	DIODE
D3	$	4822 130 32778	DIODE
D4	$	4822 130 32778	DIODE
D5	$	4822 130 32778	DIODE
D6	$	4822 130 32778	DIODE
D7		4822 130 80375	DIODE
D11	$	4822 130 32778	DIODE
D12	$	4822 130 32778	DIODE
D14	$	4822 130 32778	DIODE
D15	$	4822 130 32778	DIODE
D17		4822 130 80375	DIODE
D19	$	4822 130 32778	DIODE
D20	$	4822 130 32778	DIODE
D21	$	4822 130 32778	DIODE
D202		4822 130 80375	DIODE
R1		4822 051 30681	RESISTOR
R2		4822 051 30475	RESISTOR
R3		4822 051 30475	RESISTOR
R5		4822 051 30103	RESISTOR
R6		4822 051 30361	RESISTOR
R10		4822 051 30102	RESISTOR
R11		4822 051 30681	RESISTOR
R12		4822 116 83128	RESISTOR
R13		4822 051 30102	RESISTOR
R16		4822 051 30392	RESISTOR
R17		4822 101 10891	V.RES. PB Y LEVEL
R18		4822 051 30333	RESISTOR
R19		4822 051 30823	RESISTOR
R21		4822 051 30331	RESISTOR
R22		4822 051 30621	RESISTOR
R23		4822 051 30561	RESISTOR
R24		4822 051 30182	RESISTOR
R25		4822 051 30222	RESISTOR
R26		4822 051 30102	RESISTOR
R27		4822 051 30183	RESISTOR
R28		4822 051 30822	RESISTOR
R29		4822 051 30562	RESISTOR
R30		4822 051 30562	RESISTOR
R31		4822 051 30183	RESISTOR
R32		4822 051 30562	RESISTOR
R33		4822 051 30562	RESISTOR
R37		4822 051 30162	RESISTOR
R38		4822 051 30332	RESISTOR
R40		4822 051 30102	RESISTOR
R41		4822 101 10892	V RESISTOR,CARRIER
R42		4822 101 10851	V RESISTOR,DEVIATION
R43		4822 051 30222	RESISTOR
R44		4822 051 30432	RESISTOR
R45		4822 051 30122	RESISTOR
R46		4822 116 81482	RESISTOR
R47		4822 051 30103	RESISTOR
R48		4822 051 30911	RESISTOR
R49		4822 051 30103	RESISTOR
R51		4822 051 30102	RESISTOR
R52		4822 051 30102	RESISTOR
R53		4822 051 30102	RESISTOR
R54		4822 051 30242	RESISTOR
R55		4822 051 30392	RESISTOR
R56		4822 101 30673	V RES. NC BALANCE
R57		4822 051 30102	RESISTOR
R58		4822 051 30821	RESISTOR
R59		4822 051 30102	RESISTOR
R60		4822 101 10851	V RES. EE Y LEVEL
R61		4822 051 30102	RESISTOR
R62		4822 051 30334	RESISTOR
R64		4822 101 10894	V.RES. WHITE CLIP
R65		4822 051 30103	RESISTOR
R66		4822 051 30434	RESISTOR
R67		4822 051 30102	RESISTOR
R68		4822 051 30102	RESISTOR
R69		4822 051 30102	RESISTOR
R70		4822 051 30471	RESISTOR
R71		4822 051 30122	RESISTOR
R72		4822 051 30333	RESISTOR
R73		4822 051 30333	RESISTOR
R74		4822 051 30681	RESISTOR
R75		4822 051 30561	RESISTOR
R76		4822 051 30102	RESISTOR
R77		4822 051 30562	RESISTOR
R78		4822 051 30681	RESISTOR
R79		4822 051 30222	RESISTOR
R81		4822 051 30475	RESISTOR
R83		4822 051 30272	RESISTOR
R84		4822 051 30105	RESISTOR
R85		4822 051 30155	RESISTOR
R88		4822 116 81481	RESISTOR
R89		4822 116 81519	RESISTOR
R90		4822 116 81521	RESISTOR
R208		4822 051 30472	RESISTOR
C1		4822 126 10027	CAPACITOR
C2		4822 126 10026	CAPACITOR
C4		4822 126 11626	CAPACITOR
C8		4822 126 10489	CAPACITOR
C9		4822 126 10023	CAPACITOR
C11		4822 126 10034	CAPACITOR
C12		4822 126 10026	CAPACITOR
C13		4822 126 11622	CAPACITOR
C14		4822 126 11621	CAPACITOR
C17		4822 126 11621	CAPACITOR
C18		4822 122 33991	CAPACITOR
C19		4822 124 23854	E CAPACITOR
C20		4822 126 11621	CAPACITOR
C21		4822 124 23854	E CAPACITOR
C22		4822 124 23848	E CAPACITOR
C23		4822 124 23286	E CAPACITOR
C24		4822 124 80356	NP E CAPACITOR
C25		4822 124 23286	E CAPACITOR
C26		4822 124 23821	E CAPACITOR
C27		4822 126 11621	CAPACITOR
C29		4822 126 11621	CAPACITOR
C30		4822 124 23852	E CAPACITOR
C31		4822 124 23854	E CAPACITOR
C32		4822 126 11624	CAPACITOR
C33		4822 126 11393	CAPACITOR
C34		4822 124 23848	E CAPACITOR
C35		4822 126 11623	CAPACITOR
C36		4822 122 10532	CAPACITOR
C37		4822 126 11393	CAPACITOR
C38		4822 122 33986	CAPACITOR
C40		4822 122 33988	CAPACITOR
C41		4822 126 11618	CAPACITOR
C42		4822 124 23843	E CAPACITOR
C43		4822 124 23286	E CAPACITOR
C44		4822 126 11621	CAPACITOR
C45		4822 124 23286	E CAPACITOR
C46		4822 126 11621	CAPACITOR
C47		4822 124 23287	E CAPACITOR
C48		4822 126 11621	CAPACITOR
C49		4822 122 90058	CAPACITOR
C50		4822 126 11621	CAPACITOR
C51		4822 126 11621	CAPACITOR
C52		4822 124 23287	E CAPACITOR
C53		4822 124 23286	E CAPACITOR
C54		4822 126 11621	CAPACITOR
C56		4822 124 80357	NP E CAPACITOR

Q211	4822 130 63144		TRANSISTOR
Q213	4822 130 42431		TRANSISTOR
Q214	4822 130 63144		TRANSISTOR
Q221	4822 130 42593		TRANSISTOR
D203	4822 130 32778	$	DIODE
D205	4822 130 32778	$	DIODE
D209	4822 130 32778	$	DIODE
D281	4822 130 32778	$	DIODE
R201	4822 116 83145		RESISTOR
R202	4822 116 83164		RESISTOR
R203	4822 116 83164		RESISTOR
R206	4822 116 83144		RESISTOR
R207	4822 100 11925		V RESISTOR, LP PB EQ
R208	4822 116 81536		RESISTOR
R209	4822 116 83155		RESISTOR
R210	4822 116 83189		RESISTOR
R211	4822 116 83176		RESISTOR
R212	4822 116 83156		RESISTOR
R213	4822 116 83163		RESISTOR
R214	4822 116 83178		RESISTOR
R215	4822 100 11927		V RESISTOR, SP REC
R216	4822 116 83146		RESISTOR
R217	4822 116 83146		RESISTOR
R218	4822 116 83145		RESISTOR
R219	4822 116 83151		RESISTOR
R220	4822 116 83169		RESISTOR
R221	4822 116 83175		RESISTOR
R222	4822 100 11927		V RESISTOR, EP REC
R227	4822 111 41568		RESISTOR
R229	4822 116 83151		RESISTOR
R230	4822 116 83146		RESISTOR
R240	4822 116 83145		RESISTOR
R242	4822 116 81536		RESISTOR
R243	4822 116 83145		RESISTOR
R244	4822 116 83155		RESISTOR
R245	4822 116 83145		RESISTOR
R247	4822 116 83163		RESISTOR
R248	4822 116 83163		RESISTOR
R249	4822 116 83191		RESISTOR
R250	4822 116 83194		RESISTOR
R251	4822 116 83194		RESISTOR
R257	4822 116 83186		RESISTOR
R258	4822 116 81751		RESISTOR
R264	4822 116 83174		RESISTOR
R265	4822 116 83145		RESISTOR
R268	4822 116 83142		RESISTOR
R269	4822 116 83191		RESISTOR
R280	4822 116 83337		RESISTOR
R281	4822 116 83191		RESISTOR
R282	4822 116 83178		RESISTOR
R283	4822 050 11004		RESISTOR
R284	4822 116 83169		RESISTOR
R286	4822 116 81638		RESISTOR
C201	4822 126 11601		CAPACITOR
C202	4822 126 11602		CAPACITOR
C203	4822 126 11601		CAPACITOR
C204	4822 126 11601		CAPACITOR
C205	4822 124 23825		E CAPACITOR
C206	4822 126 11601		CAPACITOR
C207	4822 126 11601		CAPACITOR
C208	4822 126 11601		CAPACITOR
C209	4822 126 11601		CAPACITOR
C210	4822 126 11601		CAPACITOR
C212	4822 124 80346		E CAPACITOR
C213	4822 126 11601		CAPACITOR
C214	4822 124 23859		E CAPACITOR
C215	4822 124 23841		E CAPACITOR
C216	4822 124 80323		E CAPACITOR
C217	4822 126 11601		CAPACITOR
C218	4822 126 11601		CAPACITOR
C226	4822 126 11603		CAPACITOR
C227	4822 126 11601		CAPACITOR
C229	4822 126 12428		CAPACITOR
C280	4822 124 80317		E CAPACITOR
C281	4822 124 80355		E CAPACITOR
C282	4822 126 11858		CAPACITOR
C284	4822 126 11601		CAPACITOR
C285	4822 126 11601		CAPACITOR
C286	4822 126 11601		CAPACITOR
C287	4822 126 11601		CAPACITOR
C288	4822 121 70009		M CAPACITOR
C289	4822 126 11833		CAPACITOR
C290	4822 126 11654		CAPACITOR
C291	4822 126 11603		CAPACITOR
C293	4822 124 42276		E CAPACITOR
C294	4822 126 11601		CAPACITOR
C295	4822 126 12386		CAPACITOR
L201	4822 157 60104		COIL
L202	4822 157 62375		COIL
L203	4822 157 70191		COIL
L204	4822 157 60104		COIL
L206	4822 157 62373		COIL
L280	4822 157 60104		COIL
L282	4822 157 63582		COIL
CN201	4822 265 41254		CONNECTOR
IC301	4822 209 31725		IC
Q301	4822 130 63163		TRANSISTOR
Q302	4822 130 63163		TRANSISTOR
Q304	4822 130 63163		TRANSISTOR
R301	4822 050 11009		RESISTOR
R302	4822 116 83193		RESISTOR
R303	4822 116 83186		RESISTOR
R304	4822 116 83164		RESISTOR
R305	4822 116 83176		RESISTOR
R306	4822 116 83179		RESISTOR
R308	4822 116 83183		RESISTOR
R309	4822 116 83172		RESISTOR
R310	4822 116 83146		RESISTOR
R311	4822 116 81543		RESISTOR
R313	4822 117 10017		RESISTOR
R314	4822 116 83185		RESISTOR
R315	4822 116 83189		RESISTOR
R316	4822 116 83149		RESISTOR
R317	4822 111 30983		RESISTOR
R318	4822 117 10019		RESISTOR
R319	4822 116 83195		RESISTOR
R320	4822 117 10051		RESISTOR
R321	4822 116 83171		RESISTOR
R322	4822 116 83146		RESISTOR
R323	4822 116 83146		RESISTOR
R324	4822 116 83184		RESISTOR
R325	4822 116 83196		RESISTOR
R326	4822 116 83169		RESISTOR
R327	4822 116 81537		RESISTOR
R328	4822 050 23903		RESISTOR
R329	4822 116 83144		RESISTOR
R330	4822 116 83335		RESISTOR
R331	4822 116 83156		RESISTOR

R332	4822 111 30974		RESISTOR
R333	4822 117 10018		RESISTOR
R344	4822 111 30974		RESISTOR
R345	4822 117 10053	$	FUSIBLE RESISTOR
R348	4822 111 30986		RESISTOR
C301	4822 126 11646		CAPACITOR
C302	4822 121 70195		M CAPACITOR
C303	4822 124 80313		E CAPACITOR
C304	4822 126 11654		CAPACITOR
C305	4822 126 12389		CAPACITOR
C306	4822 126 12427		CAPACITOR
C307	4822 126 12389		CAPACITOR
C308	4822 126 12391		CAPACITOR
C309	4822 126 11613		CAPACITOR
C310	4822 124 23867		E CAPACITOR
C311	4822 124 23822		E CAPACITOR
C312	4822 124 23873		E CAPACITOR
C313	4822 126 11649		CAPACITOR
C314	4822 124 23832		E CAPACITOR
C315	4822 124 23827		E CAPACITOR
C316	4822 124 23873		E CAPACITOR
C317	4822 124 23874		E CAPACITOR
C318	4822 124 23863		E CAPACITOR
C319	4822 121 70208		M CAPACITOR
C320	4822 121 70209		M CAPACITOR
C321	4822 124 80345		TF CAPACITOR
C327	4822 126 11647		CAPACITOR
L301	4822 157 70185		COIL
T301	4822 148 81187		OSC TRANSFORMER
CN301	4822 265 30912		CONNECTOR
CN302	4822 265 20527		CONNECTOR
IC401	4822 209 31827		IC
IC402	4822 209 80587		IC
IC451	4822 209 30234		IC
D402	4822 130 32778	$	DIODE
D403	4822 130 32778	$	DIODE
D405	4822 130 32778	$	DIODE
D406	4822 130 81737		ZENER DIODE
D409	4822 130 32778	$	DIODE
R401	4822 116 83183		RESISTOR
R402	4822 100 11928		V RESISTOR, SW PT
R403	4822 116 83145		RESISTOR
R404	4822 116 81694		RESISTOR
R406	4822 111 50565		RESISTOR
R408	4822 116 81694		RESISTOR
R410	4822 116 83165		RESISTOR
R412	4822 116 83148		RESISTOR
R413	4822 116 83169		RESISTOR
R414	4822 116 83182		RESISTOR
R415	4822 116 83182		RESISTOR
R416	4822 050 11004		RESISTOR
R417	4822 116 83151		RESISTOR
R418	4822 116 83166		RESISTOR
R419	4822 117 10019		RESISTOR
R420	4822 116 83164		RESISTOR
R421	4822 116 83163		RESISTOR
R422	4822 116 83145		RESISTOR
R423	4822 116 83145		RESISTOR
R424	4822 116 83154		RESISTOR
R425	4822 116 83146		RESISTOR
R426	4822 116 83183		RESISTOR
R429	4822 116 83184		RESISTOR
R430	4822 117 10023		RESISTOR
R431	4822 116 83146		RESISTOR
R433	4822 116 83148		RESISTOR
R434	4822 116 83169		RESISTOR
R440	4822 116 83145		RESISTOR
R450	4822 111 30978		RESISTOR
R451	4822 116 83145		RESISTOR
R452	4822 116 83175		RESISTOR
R453	4822 116 83168		RESISTOR
R458	4822 116 83152		RESISTOR
C401	4822 121 70211		M CAPACITOR
C402	4822 126 11612		CAPACITOR
C403	4822 126 11654		CAPACITOR
C405	4822 126 11611		CAPACITOR
C407	4822 126 11613		CAPACITOR
C409	4822 126 11611		CAPACITOR
C411	4822 124 80306		E CAPACITOR
C412	4822 124 80306		E CAPACITOR
C413	4822 126 11652		CAPACITOR
C414	4822 126 12456		CAPACITOR
C415	4822 121 70214		TF CAPACITOR
C416	4822 126 11832		CAPACITOR
C417	4822 126 11612		CAPACITOR
C418	4822 124 23826		E CAPACITOR
C419	4822 126 12374		CAPACITOR
C420	4822 124 23826		E CAPACITOR
C421	4822 124 80353		E CAPACITOR
C422	4822 126 11612		CAPACITOR
C423	4822 126 11612		CAPACITOR
C424	4822 124 80305		E CAPACITOR
C425	4822 126 12437		CAPACITOR
C426	4822 121 70212		M CAPACITOR
C427	4822 124 23826		E CAPACITOR
C428	4822 124 23826		E CAPACITOR
C429	4822 126 12375		CAPACITOR
C452	4822 126 11611		CAPACITOR
C454	4822 126 12372		CAPACITOR
C455	4822 126 11611		CAPACITOR
C456	4822 121 70213		M CAPACITOR
C457	4822 126 11611		CAPACITOR
C458	4822 124 80305		E CAPACITOR
C459	4822 126 11611		CAPACITOR
L451	4822 157 90157		COIL
CN401	4822 265 20527		CONNECTOR
CN402	4822 265 30912		CONNECTOR
CP401	5322 157 53342	$	CIRCUIT PROTECTOR
IC601	4822 209 32128		IC
IC602	4822 209 30236		IC
Q601	4822 130 62503		TRANSISTOR
D601	4822 130 32778	$	DIODE
D602	4822 130 80684		ZENER DIODE
D603	4822 130 32778	$	DIODE
D604	4822 130 32778	$	DIODE
D605	4822 130 32778	$	DIODE
D606	4822 130 32778	$	DIODE
R602	4822 116 83145		RESISTOR
R603	4822 116 83145		RESISTOR
R604	4822 116 83145		RESISTOR
R605	4822 116 83182		RESISTOR
R606	4822 116 83182		RESISTOR
R607	4822 116 81641		RESISTOR
R608	4822 116 83182		RESISTOR
R609	4822 116 83145		RESISTOR
R610	4822 116 83182		RESISTOR

C57	4822 124 23847	E CAPACITOR
C58	4822 124 23848	E CAPACITOR
C59	4822 126 11619	CAPACITOR
C60	4822 126 11621	CAPACITOR
C61	4822 124 23854	E CAPACITOR
C62	4822 126 11618	CAPACITOR
C63	4822 126 11621	CAPACITOR
C64	4822 124 23849	E CAPACITOR
C65	4822 126 11621	CAPACITOR
C66	4822 124 23849	E CAPACITOR
C67	4822 126 11619	CAPACITOR
C69	4822 126 11573	CAPACITOR
C71	4822 126 10017	CAPACITOR
C72	4822 124 23848	E CAPACITOR
C73	4822 124 23287	E CAPACITOR
C74	4822 124 23839	E CAPACITOR
C75	4822 126 11621	CAPACITOR
C76	4822 126 11621	CAPACITOR
C77	4822 124 23849	E CAPACITOR
C78	4822 126 11647	CAPACITOR
C79	4822 126 11621	CAPACITOR
C80	4822 126 11627	CAPACITOR
C82	4822 124 23852	E CAPACITOR
C84	4822 126 10025	CAPACITOR
C91	4822 126 11628	CAPACITOR
C93	4822 126 11621	CAPACITOR
C96	4822 126 11621	CAPACITOR
C97	4822 126 11618	CAPACITOR
C98	4822 126 10015	CAPACITOR
C99	4822 126 10025	CAPACITOR
C100	4822 126 11625	CAPACITOR
C102	4822 126 10496	CAPACITOR
L1	4822 157 70189	COIL
L3	4822 153 10397	COIL
L4	4822 153 10397	COIL
L6	4822 157 90199	COIL
L7	4822 157 60066	COIL
L8	4822 157 60104	COIL
L9	4822 157 60104	COIL
L10	4822 157 62381	COIL
L11	4822 157 60104	COIL
L12	4822 157 60104	COIL
L13	4822 157 63398	COIL
L15	4822 157 62374	COIL
L16	4822 157 90199	COIL
LPF1	4822 156 21698	LOW PASS FILTER
LPF2	4822 156 21696	LOW PASS FILTER
LPF3	4822 156 21697	LOW PASS FILTER
DL1	4822 320 50315	COMB FILTER
X1	4822 242 81409	CRYSTAL RESONATOR
CN1	4822 265 41135	PIN HEADER
CN2	4822 265 41135	PIN HEADER
CN3	4822 265 41135	PIN HEADER

AUDIO/CONTROL/ERASE HEAD PCB ASSEMBLY

PWBA	4822 214 33812	A/CONTR.HEAD PCB
CN2	4822 267 31542	WIRE TRAP
PWBA4	4822 214 33784	FULL ERASE HEAD PCB
CN1	4822 267 31541	WIRE TRAP

TIMER/DISPLAY/SWITCH PCB ASSEMBLY

PWBA	4822 214 33891	T/D/S PCB ASSY (/95)
PWBA	4822 214 33884	T/D/S PCB ASSY (/57/75)
IC1	4822 209 32129	IC
IC2	4822 209 30238	IC
IC101	4822 209 31733	IR DETECT UNIT
Q1	4822 130 42483	TRANSISTOR
D1	4822 130 80793	ZENER DIODE
D2 $	4822 130 32778	DIODE
D3 $	4822 130 32778	DIODE
D4	4822 130 81748	DIODE
D5	4822 130 81748	DIODE
D6	4822 130 83196	ZENER DIODE
D7 $	4822 130 32778	DIODE
D111	4822 130 80589	DIODE
D112	4822 130 80589	DIODE
D113	4822 130 80589	DIODE
D124	4822 130 80589	DIODE (/57/75)
R1	4822 116 81636	RESISTOR
R2	4822 116 81641	RESISTOR
R3	4822 050 12703	RESISTOR
R4	4822 050 16802	RESISTOR
R5	4822 116 81638	RESISTOR
R6	4822 116 81638	RESISTOR
R7	4822 116 81536	RESISTOR
R8	4822 116 81636	RESISTOR
R9	4822 116 81636	RESISTOR
R10	4822 116 81636	RESISTOR
R11	4822 116 81636	RESISTOR
R12	4822 116 81638	RESISTOR
R13	4822 116 82083	RESISTOR
R14	4822 116 82083	RESISTOR
R15	4822 116 81636	RESISTOR
R16	4822 116 81636	RESISTOR
R17	4822 116 81641	RESISTOR
R18	4822 116 81638	RESISTOR
R19	4822 116 81638	RESISTOR
R20	4822 116 81638	RESISTOR
R21	4822 116 81638	RESISTOR
R24	4822 111 50565	RESISTOR
R27	4822 116 81638	RESISTOR
RA1	4822 111 92135	RESISTOR ARRAY
C2	4822 126 11647	CAPACITOR
C3	4822 126 11647	CAPACITOR
C4	4822 124 23286	E CAPACITOR
C5	4822 124 23823	E CAPACITOR
C6	4822 125 60186	TRIMMER CAPACITOR
C7	4822 126 11642	CAPACITOR
C8	4822 124 80315	E CAPACITOR
C9	4822 124 80318	E CAPACITOR
C10	4822 124 23286	E CAPACITOR
C13	4822 126 11638	CAPACITOR
C14	4822 126 11647	CAPACITOR
X1 $	4822 242 80341	XTAL (M)
S1	4822 276 13309	TACT SWITCH, POWER
S2	4822 276 13386	TACT SWITCH, STOP/95
S2	4822 276 13309	TACT SWITCH, (/57/75)
S3	4822 276 13309	TACT SWITCH, FF
S4	4822 276 13386	TACT SWITCH, REW
S5	4822 276 13309	TACT SWITCH, CH+
S6	4822 276 13309	TACT SWITCH, REC
S7	4822 276 13309	TACT SWITCH, PLAY
S8	4822 276 13309	TACT SWITCH, CH- (/95)
S8	4822 276 13386	TACT SWITCH, (/57/75)
S9	4822 276 13309	TACT SWITCH, PAUSE
FDP1	4822 130 91189	FLUORESCENT DISPLAY
HD1	4822 256 91979	FDP HOLDER(L)
HD2	4822 256 91981	FDP HOLDER(R)
CN1	4822 403 70458	WIRE TRAP

DECK TERMINAL PCB ASSEMBLY

PWBA1	4822 214 33813	DECK TERMINAL PCB
Q1	4822 130 82706	END SENSOR
D1	4822 130 83159	ZENER DIODE
R1	4822 116 81536	RESISTOR
R3	4822 116 82084	RESISTOR
R4	4822 116 82084	RESISTOR
C1	4822 126 10039	CAPACITOR
C2	4822 126 11637	CAPACITOR
PS1	4822 130 82705	PH INTERRUPTER
CN1	4822 265 41253	FFC CONNECTOR
CN2	4822 265 41137	7PIN CONNECTOR
CN3	4822 265 30908	4PIN CONNECTOR

LOADING MDA PCB ASSEMBLY

PWBA2	4822 214 33782	LOADING MDA ASSY
IC1 $	4822 209 30245	IC
IC1	4822 209 31732	IC
C1	4822 124 80322	E CAPACITOR
SPC1	4822 462 41856	SPACER
CN1	4822 403 70462	WIRE TRAP

CASSETTE HOUSING PCB ASSEMBLY

PWBA3	4822 214 33783	CASS HOUSING PCB
Q2	4822 130 62798	PHOTO TRANSISTOR
C1	4822 126 11631	CAPACITOR
PS3	4822 130 82707	CASSETTE SENSOR

ALIGNMENT TOOLS

4822 397 30262	TAPE MH2
4822 395 80196	WRENCH TOR GAUGE
4822 395 90615	TAPE TENSION CASS
4822 395 90916	A/C HEAD BIT
4822 395 90904	ROLLER DRIVER
4822 395 90915	SLP AUTO TRACKING

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R611	4822 116 83182		RESISTOR
R612	4822 116 83182		RESISTOR
R613	4822 116 81641		RESISTOR
R615	4822 116 83182		RESISTOR
R616	4822 116 83182		RESISTOR
R617	4822 116 81641		RESISTOR
R618	4822 116 83182		RESISTOR
R619	4822 116 83182		RESISTOR
R620	4822 116 83181		RESISTOR
R621	4822 116 81641		RESISTOR
R622	4822 116 81641		RESISTOR
R623	4822 116 83148		RESISTOR
R624	4822 116 81641		RESISTOR
R625	4822 116 83146		RESISTOR
R626	4822 116 81694		RESISTOR
R627	4822 116 83157		RESISTOR
R628	4822 116 83176		RESISTOR
R629	4822 116 81636		RESISTOR
R630	4822 116 81636		RESISTOR
R631	4822 116 81636		RESISTOR
R632	4822 050 15603		RESISTOR
R633	4822 116 83181		RESISTOR
R634	4822 116 83176		RESISTOR
R635	4822 116 81636		RESISTOR
R636	4822 116 83191		RESISTOR
R637	4822 116 83146		RESISTOR
R640	4822 116 83146		RESISTOR
C601	4822 126 11636		CAPACITOR
C602	4822 124 80355		E CAPACITOR
C604	4822 124 23832		E CAPACITOR
C605	4822 126 11639		CAPACITOR
C606	4822 124 23824		E CAPACITOR
C607	4822 126 12445		CAPACITOR
C615	4822 126 12436		CAPACITOR
C616	4822 126 11612		CAPACITOR
C617	4822 126 11832		CAPACITOR
C618	4822 126 11832		CAPACITOR
C619	4822 126 10419		CAPACITOR
L601	4822 157 62372		COIL
CF601	4822 242 81305		RESONATOR
CN601	4822 265 41257		FFC CONNECTOR
CN602	4822 265 30912		CONNECTOR
CP601	4822 209 63612	$	CIRCUIT PROTECTOR
R953	4822 116 83142		RESISTOR
L901	4822 157 60438		COIL
L904	4822 157 60438		COIL
L965	4822 157 62372		COIL
Q801	4822 130 62794		TRANSISTOR
Q802	4822 130 62801		TRANSISTOR
Q803	4822 130 42431		TRANSISTOR
Q804	4822 130 42431		TRANSISTOR
Q805	4822 130 60591		TRANSISTOR
Q806	4822 130 61892		TRANSISTOR
R801	4822 116 81729		RESISTOR
R802	4822 116 81536		RESISTOR
R803	4822 116 81637		RESISTOR
R804	4822 116 81729		RESISTOR
R805	4822 100 11902		V RESISTOR, SWD 5V
R806	4822 116 81729		RESISTOR
R807	4822 116 82085		RESISTOR
R808	4822 116 81729		RESISTOR
R809	4822 116 81639		RESISTOR

C801	4822 126 11647		CAPACITOR
C802	4822 124 80308		E CAPACITOR
C803	4822 124 80308		E CAPACITOR
C804	4822 124 23873		E CAPACITOR
C805	4822 124 23839		E CAPACITOR
C806	4822 124 80311		E CAPACITOR
L801	4822 157 60104		COIL
CN801	4822 265 41262		WIRE TRAP
CN802	4822 403 70458		WIRE TRAP
CP801	4822 209 63611	$	CIRCUIT PROTECTOR

PRE/REC BOARD ASSEMBLY

PWBA2	4822 214 33814		PRE/REC BOARD ASSY
IC701	4822 209 31731		IC
Q701	4822 130 60862		TRANSISTOR
Q702	4822 130 60669		TRANSISTOR
Q703	4822 130 60669		TRANSISTOR
Q704	4822 130 60997		TRANSISTOR
Q705	4822 130 60997		TRANSISTOR
Q706	4822 130 60997		TRANSISTOR
D701	4822 130 32778	$	DIODE
D702	4822 130 32778	$	DIODE
D703	4822 130 32778	$	DIODE
D704	4822 130 32778	$	DIODE
R701	4822 116 83145		RESISTOR
R702	4822 116 83163		RESISTOR
R703	4822 116 83163		RESISTOR
R704	4822 116 83178		RESISTOR
R705	4822 116 83178		RESISTOR
R706	4822 117 10056		RESISTOR
R707	4822 116 83182		RESISTOR
R708	4822 116 83182		RESISTOR
R709	4822 116 83195		RESISTOR
R710	4822 116 83195		RESISTOR
R711	4822 117 10016		RESISTOR
R712	4822 116 83185		RESISTOR
R714	4822 117 10016		RESISTOR
R715	4822 116 83186		RESISTOR
R716	4822 116 83156		RESISTOR
R717	4822 116 83186		RESISTOR
R718	4822 116 81751		RESISTOR
R719	4822 116 83177		RESISTOR
R720	4822 116 83146		RESISTOR
R721	4822 117 10019		RESISTOR
R722	4822 116 83156		RESISTOR
R723	4822 117 10026		RESISTOR
R724	4822 117 10055		RESISTOR
R725	4822 116 83186		RESISTOR
R726	4822 117 10051		RESISTOR
R727	4822 116 83174		RESISTOR
R728	4822 116 83167		RESISTOR
R729	4822 116 83167		RESISTOR
R730	4822 116 83147		RESISTOR
R731	4822 116 83157		RESISTOR
C701	4822 124 23837		E CAPACITOR
C702	4822 126 11601		CAPACITOR
C703	4822 126 12444		CAPACITOR
C704	4822 126 12397		CAPACITOR
C705	4822 126 11601		CAPACITOR
C706	4822 126 11833		CAPACITOR
C707	4822 126 11601		CAPACITOR
C708	4822 126 12428		CAPACITOR

C709	4822 126 11858	CAPACITOR
C710	4822 126 12442	CAPACITOR
C711	4822 126 12443	CAPACITOR
C712	4822 126 12378	CAPACITOR
C713	4822 126 11647	CAPACITOR
C714	4822 126 12404	CAPACITOR
C715	4822 124 80319	E CAPACITOR
C717	4822 126 11601	CAPACITOR
C718	4822 126 12378	CAPACITOR
C719	4822 126 11832	CAPACITOR
C720	4822 126 12398	CAPACITOR
C721	4822 126 10874	CAPACITOR
C722	4822 126 10874	CAPACITOR
C723	4822 126 11601	CAPACITOR
C724	4822 126 11601	CAPACITOR
C725	4822 126 11832	CAPACITOR
C726	4822 126 11832	CAPACITOR
C727	4822 126 10874	CAPACITOR
C728	4822 126 10874	CAPACITOR
C729	4822 124 80358	E CAPACITOR
C730	4822 126 12395	CAPACITOR
C731	4822 126 11601	CAPACITOR
C733	4822 126 12439	CAPACITOR
C735	4822 126 12441	CAPACITOR
C745	4822 126 10496	CAPACITOR
L701	4822 157 70134	COIL
L702	4822 157 62379	COIL
L703	4822 157 62377	COIL
L704	4822 157 62379	COIL
L705	4822 157 62378	COIL
L706	4822 157 62373	COIL
L707	4822 153 10397	COIL
L708	4822 157 70135	COIL
SLD1	4822 466 62265	SHIELD CASE
SLD2	4822 466 62266	SHIELD COVER
CN701	4822 267 31543	CONNECTOR
CN703	4822 265 41261	CONNECTOR

VIDEO UNIT BOARD ASSEMBLY

PWBA	4822 214 33811	VIDEO UNIT BD ASSY
SLD1	4822 466 62069	SHIELD PLATE
SLD2	4822 466 62284	SHIELD CASE
IC1	4822 209 31735	IC
IC2	4822 209 30243	IC
Q1	4822 130 60862	TRANSISTOR
Q5	4822 130 60862	TRANSISTOR
Q10	4822 130 60669	TRANSISTOR
Q11	4822 130 60997	TRANSISTOR
Q12	4822 130 60997	TRANSISTOR
Q13	4822 130 60997	TRANSISTOR
Q14	4822 130 60997	TRANSISTOR
Q18	4822 130 60669	TRANSISTOR
Q19	4822 130 60669	TRANSISTOR
Q20	4822 130 60669	TRANSISTOR
Q21	4822 130 60862	TRANSISTOR
Q23	4822 130 60997	TRANSISTOR
Q24	4822 130 60862	TRANSISTOR
Q25	4822 130 60669	TRANSISTOR
Q26	4822 130 60669	TRANSISTOR
Q28	4822 130 60669	TRANSISTOR
Q29	4822 130 60669	TRANSISTOR
Q30	4822 130 60669	TRANSISTOR
Q31	4822 130 60854	TRANSISTOR
Q32	4822 130 60997	TRANSISTOR
Q33	4822 130 63164	TRANSISTOR
D1	4822 130 82708	DIODE
D3	4822 130 32778 $	DIODE
D4	4822 130 32778 $	DIODE
D5	4822 130 32778 $	DIODE
D6	4822 130 32778 $	DIODE
D11	4822 130 32778 $	DIODE
D12	4822 130 32778 $	DIODE
D14	4822 130 32778 $	DIODE
D15	4822 130 32778 $	DIODE
D17	4822 130 80375	DIODE
D19	4822 130 32778 $	DIODE
D20	4822 130 32778 $	DIODE
D21	4822 130 32778 $	DIODE
D202	4822 130 80375	DIODE
R1	4822 051 30681	RESISTOR
R2	4822 051 30475	RESISTOR
R3	4822 051 30475	RESISTOR
R5	4822 051 30103	RESISTOR
R6	4822 051 30361	RESISTOR
R10	4822 051 30102	RESISTOR
R11	4822 051 30681	RESISTOR
R12	4822 116 83128	RESISTOR
R13	4822 051 30102	RESISTOR
R16	4822 051 30392	RESISTOR
R17	4822 101 10891	V.RESISTOR, PB Y LVL
R18	4822 051 30333	RESISTOR
R19	4822 051 30823	RESISTOR
R21	4822 051 30331	RESISTOR
R22	4822 051 30621	RESISTOR
R23	4822 051 30561	RESISTOR
R24	4822 051 30182	RESISTOR
R25	4822 051 30222	RESISTOR
R26	4822 051 30102	RESISTOR
R27	4822 051 30183	RESISTOR
R28	4822 051 30822	RESISTOR
R29	4822 051 30562	RESISTOR
R30	4822 051 30562	RESISTOR
R31	4822 051 30183	RESISTOR
R32	4822 051 30562	RESISTOR
R33	4822 051 30562	RESISTOR
R37	4822 051 30162	RESISTOR
R38	4822 051 30332	RESISTOR
R40	4822 051 30102	RESISTOR
R41	4822 101 10892	V RESISTOR, CARRIER
R42	4822 101 10851	V RESISTOR, DEV.
R43	4822 051 30222	RESISTOR
R44	4822 051 30432	RESISTOR
R45	4822 051 30122	RESISTOR
R46	4822 116 81482	RESISTOR
R47	4822 051 30103	RESISTOR
R48	4822 051 30911	RESISTOR
R49	4822 051 30103	RESISTOR
R51	4822 051 30102	RESISTOR
R52	4822 051 30102	RESISTOR
R53	4822 051 30102	RESISTOR
R54	4822 051 30242	RESISTOR
R55	4822 051 30392	RESISTOR
R56	4822 101 30673	V RESISTOR, NC BALAN
R57	4822 051 30102	RESISTOR
R58	4822 051 30821	RESISTOR
R59	4822 051 30102	RESISTOR

R60	4822 101 10851	V RESISTOR, EE Y LVL
R61	4822 051 30102	RESISTOR
R62	4822 051 30334	RESISTOR
R64	4822 101 10894	V.RESISTOR, WHITE CL
R66	4822 051 30434	RESISTOR
R67	4822 051 30102	RESISTOR
R68	4822 051 30102	RESISTOR
R69	4822 051 30102	RESISTOR
R70	4822 051 30471	RESISTOR
R71	4822 051 30122	RESISTOR
R72	4822 051 30333	RESISTOR
R73	4822 051 30333	RESISTOR
R74	4822 051 30681	RESISTOR
R75	4822 051 30561	RESISTOR
R76	4822 051 30102	RESISTOR
R77	4822 051 30562	RESISTOR
R78	4822 051 30681	RESISTOR
R79	4822 051 30222	RESISTOR
R81	4822 051 30475	RESISTOR
R83	4822 051 30272	RESISTOR
R84	4822 051 30105	RESISTOR
R85	4822 051 30155	RESISTOR
R88	4822 116 81481	RESISTOR
R89	4822 116 81519	RESISTOR
R90	4822 116 81521	RESISTOR
R208	4822 051 30472	RESISTOR
C1	4822 126 10027	CAPACITOR
C2	4822 126 10026	CAPACITOR
C4	4822 126 11626	CAPACITOR
C8	4822 126 10489	CAPACITOR
C9	4822 126 11623	CAPACITOR
C11	4822 126 10034	CAPACITOR
C12	4822 126 10026	CAPACITOR
C13	4822 126 11622	CAPACITOR
C14	4822 126 11621	CAPACITOR
C17	4822 126 11621	CAPACITOR
C18	4822 122 33991	CAPACITOR
C19	4822 124 23854	E CAPACITOR
C20	4822 126 11621	CAPACITOR
C21	4822 124 23854	E CAPACITOR
C22	4822 124 23848	E CAPACITOR
C23	4822 124 23286	E CAPACITOR
C24	4822 124 80356	NP E CAPACITOR
C25	4822 124 23286	E CAPACITOR
C26	4822 124 23821	E CAPACITOR
C27	4822 126 11621	CAPACITOR
C29	4822 126 11621	CAPACITOR
C30	4822 124 23852	E CAPACITOR
C31	4822 124 23854	E CAPACITOR
C32	4822 126 11624	CAPACITOR
C33	4822 126 11393	CAPACITOR
C34	4822 124 23848	E CAPACITOR
C35	4822 126 11623	CAPACITOR
C36	4822 122 10532	CAPACITOR
C37	4822 126 11393	CAPACITOR
C38	4822 122 33986	CAPACITOR
C40	4822 122 33988	CAPACITOR
C41	4822 126 11618	CAPACITOR
C42	4822 124 23843	E CAPACITOR
C43	4822 124 23286	E CAPACITOR
C44	4822 126 11621	CAPACITOR
C45	4822 124 23286	E CAPACITOR
C46	4822 126 11621	CAPACITOR
C47	4822 124 23287	E CAPACITOR
C48	4822 126 11621	CAPACITOR
C49	4822 122 90058	CAPACITOR
C50	4822 126 11621	CAPACITOR
C51	4822 126 11621	CAPACITOR
C52	4822 124 23287	E CAPACITOR
C53	4822 124 23286	E CAPACITOR
C54	4822 126 11621	CAPACITOR
C56	4822 124 80357	NP E CAPACITOR
C57	4822 124 23847	E CAPACITOR
C58	4822 124 23848	E CAPACITOR
C59	4822 126 11619	CAPACITOR
C60	4822 126 11621	CAPACITOR
C61	4822 124 23854	E CAPACITOR
C62	4822 126 11618	CAPACITOR
C63	4822 126 11621	CAPACITOR
C64	4822 124 23849	E CAPACITOR
C65	4822 126 11621	CAPACITOR
C66	4822 124 23849	E CAPACITOR
C67	4822 126 11619	CAPACITOR
C69	4822 126 11573	CAPACITOR
C71	4822 126 10017	CAPACITOR
C72	4822 124 23848	E CAPACITOR
C73	4822 124 23287	E CAPACITOR
C74	4822 124 23839	E CAPACITOR
C75	4822 126 11621	CAPACITOR
C76	4822 126 11621	CAPACITOR
C77	4822 124 23849	E CAPACITOR
C78	4822 126 11647	CAPACITOR
C79	4822 126 11621	CAPACITOR
C80	4822 126 11627	CAPACITOR
C82	4822 124 23852	E CAPACITOR
C84	4822 126 10025	CAPACITOR
C91	4822 126 11628	CAPACITOR
C93	4822 126 11621	CAPACITOR
C96	4822 126 11621	CAPACITOR
C97	4822 126 11618	CAPACITOR
C98	4822 126 10015	CAPACITOR
C99	4822 126 10025	CAPACITOR
C100	4822 126 11625	CAPACITOR
C102	4822 126 10496	CAPACITOR
L1	4822 157 70189	COIL
L3	4822 153 10397	COIL
L4	4822 153 10397	COIL
L6	4822 157 90199	COIL
L7	4822 157 60066	COIL
L8	4822 157 60104	COIL
L9	4822 157 60104	COIL
L10	4822 157 62381	COIL
L11	4822 157 60104	COIL
L12	4822 157 60104	COIL
L13	4822 157 63398	COIL
L15	4822 157 62374	COIL
L16	4822 157 90199	COIL
LPF1	4822 157 63392	LOW PASS FILTER
LPF2	4822 157 63393	LOW PASS FILTER
LPF3	4822 157 63405	LOW PASS FILTER
DL1	4822 320 50315	COMB FILTER
X1	4822 242 80339	CRYSTAL RESONATOR
CN1	4822 265 41135	PIN HEADER
CN2	4822 265 41135	PIN HEADER
CN3	4822 265 41135	PIN HEADER

AUDIO/CONTROL BOARD ASSEMBLY

PWBA	4822 214 33812		AUDIO/CONTROL HEAD
CN2	4822 267 31542		WIRE TRAP
PWBA4	4822 214 33784		FULL ERASE HEAD BD
CN1	4822 267 31541		WIRE TRAP

TIMER/DISPLAY/SWITCH ASSEMBLY

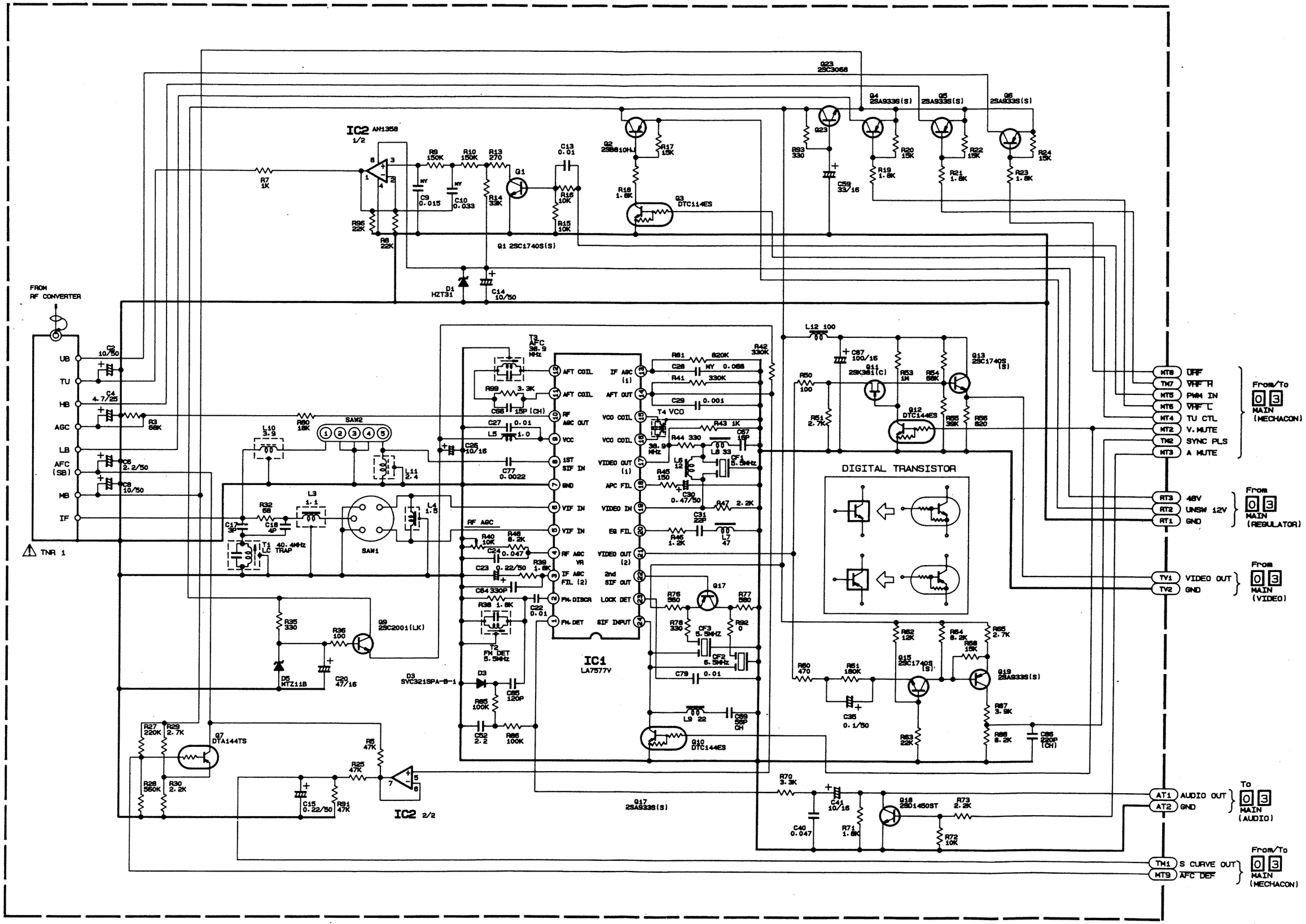
PWBA	4822 214 33815		TIMER/DISP/SW BD ASS
IC1	4822 209 32129		IC
IC2	4822 209 30238		IC
IC101	4822 209 31733		IR DETECT UNIT
Q1	4822 130 42431		TRANSISTOR
D1	4822 130 80793		ZENER DIODE
D2	4822 130 32778	$	DIODE
D3	4822 130 32778	$	DIODE
D4	4822 130 81748		DIODE
D5	4822 130 81748		DIODE
D6	4822 130 83196		ZENER DIODE
D7	4822 130 32778	$	DIODE
D111	4822 130 80589		DIODE
D112	4822 130 80589		DIODE
D113	4822 130 80589		DIODE, PAUSE
D126	4822 130 80589		DIODE, SP/LP
R1	4822 116 81636		RESISTOR
R2	4822 116 81641		RESISTOR
R3	4822 050 12703		RESISTOR
R4	4822 050 16802		RESISTOR
R5	4822 116 81638		RESISTOR
R6	4822 116 81638		RESISTOR
R7	4822 116 81536		RESISTOR
R8	4822 116 81636		RESISTOR
R9	4822 116 81636		RESISTOR
R10	4822 116 81636		RESISTOR
R11	4822 116 81636		RESISTOR
R12	4822 116 81638		RESISTOR
R13	4822 116 82083		RESISTOR
R14	4822 116 82083		RESISTOR
R15	4822 116 81636		RESISTOR
R16	4822 116 81636		RESISTOR
R17	4822 116 81641		RESISTOR
R24	4822 111 50565		RESISTOR
R27	4822 116 81638		RESISTOR
RA1	4822 111 92038		RESISTOR ARRAY
RA2	4822 111 92112		RESISTOR ARRAY
C2	4822 126 11647		CAPACITOR
C3	4822 126 11647		CAPACITOR
C4	4822 124 80317		E CAPACITOR
C5	4822 124 23823		E CAPACITOR
C6	4822 125 60186		TRIMMER CAPACITOR
C7	4822 126 11642		CAPACITOR
C8	4822 124 80354		E CAPACITOR
C9	4822 124 80318		E CAPACITOR
C10	4822 124 80317		E CAPACITOR
C13	4822 126 11638		CAPACITOR
C14	4822 126 11647		CAPACITOR
L1	4822 157 90197		COIL
X1	4822 242 80341	$	XTAL (M)
S1	4822 276 13309		TACT SWITCH, POWER
S2	4822 276 13309		TACT SWITCH, STOP
S3	4822 276 13309		TACT SWITCH, FF
S4	4822 276 13309		TACT SWITCH, REW
S5	4822 276 13309		TACT SWITCH, CH+
S6	4822 276 13309		TACT SWITCH, REC
S7	4822 276 13309		TACT SWITCH, PLAY
S8	4822 276 13309		TACT SWITCH, CH-
S9	4822 276 13309		TACT SWITCH, PAUSE
FDP1	4822 130 91189		FLUORESCENT DISPLAY
HD1	4822 256 91979		FDP HOLDER(L)
HD2	4822 256 91981		FDP HOLDER(R)
PWB	4822 214 33816		UPPER DRUM BOARD

DECK TERMINAL BOARD ASSEMBLY

PWBA1	4822 214 33813		DECK TERMINAL BOARD
Q1	4822 130 82706		END SENSOR
D1	4822 130 83159		ZENER DIODE
R1	4822 116 81536		RESISTOR
R3	4822 116 82084		RESISTOR
R4	4822 116 82084		RESISTOR
C1	4822 126 10039		CAPACITOR
C2	4822 126 11637		CAPACITOR
PS1	4822 130 82705		PH INTERRUPTER
CN1	4822 265 41253		FFC CONNECTOR
CN2	4822 265 41137		7PIN CONNECTOR
CN3	4822 265 30908		4PIN CONNECTOR
PWBA2	4822 214 33782		LOADING MDA BD ASSY
IC1	4822 209 31732	$	IC
C1	4822 124 80322		E CAPACITOR
SPC1	4822 462 41856		SPACER
CN1	4822 403 70462		WIRE TRAP
PWBA3	4822 214 33783		CASSETTE HOUSING BD
Q2	4822 130 62798		PHOTO TRANSISTOR
C1	4822 126 11631		CAPACITOR
PS3	4822 130 82707		CASSETTE SENSOR

ALIGNMENT TOOLS

4822 397 30262	TAPE MH2
4822 397 30261	TAPE MH2L
4822 395 80196	WRENCH
	TORQUE GAUGE
4822 395 90615	TAPE TENSION CASS
4822 395 90916	A/C HEAD BIT
4822 395 90904	ROLLER DRIVER
4822 395 90915	SLP AUTO TRACKING


IC2 AN1358 1/2
Q1 2SC1740S(S)
Q2 2SB810HJ
Q3 DTC114ES
Q23 2SC3066
Q4 2SA933S(S)
Q5 2SA933S(S)
Q6 2SA933S(S)
FROM RF CONVERTER
TNR 1
UB
TU
HB
AGC
LB
AFC (SB)
MB
IF
SAW2
SAW1
40.4MHz TRAP
RF AGC
IC1 LA7577V
AFT COIL
AFT COIL
RF AGC OUT
VCC
1ST SIF IN
GND
VIF IN
VIF IN
RF AGC VR
IF AGC FIL (2)
FM DISCR
FM DET
IF AGC (1)
AFT OUT
VCO COIL
VCO COIL
VIDEO OUT (1)
APC FIL
VIDEO IN
EB FIL
VIDEO OUT (2)
2nd SIF OUT
LOCK DET
SIF INPUT
T4 VCO
T3 AFC 38.9 MHz
T2 FM DET 5.5MHz
IC2 2/2
DIGITAL TRANSISTOR
Q7 DTA144TS
Q9 2SC2001(LK)
Q10 DTC144ES
Q11 2SK381(C)
Q12 DTC144ES
Q13 2SC1740S (S)
Q15 2SC1740S (S)
Q16 2SD1450ST
Q17 2SA933S(S)
Q19 2SA933S(S)
D1 HZT31
D3 SVC321SPA-B-1
D5 MTZ11B
CF1 5.5MHz
CF2 5.5MHz
CF3 5.5MHz
MT8 OFF
TM7 VHF H
MT5 PWM IN
MT6 VHF L
MT4 TU CTL
MT2 V.MUTE
TM2 SYNC PLS
MT3 A MUTE
From/To 0 3 MAIN (MECHACON)
RT3 48V
RT2 UNSW 12V
RT1 GND
From 0 3 MAIN (REGULATOR)
TV1 VIDEO OUT
TV2 GND
From 0 3 MAIN (VIDEO)
AT1 AUDIO OUT
AT2 GND
To 0 3 MAIN (AUDIO)
TM1 S CURVE OUT
MT9 AFC DEF
From/To 0 3 MAIN (MECHACON)